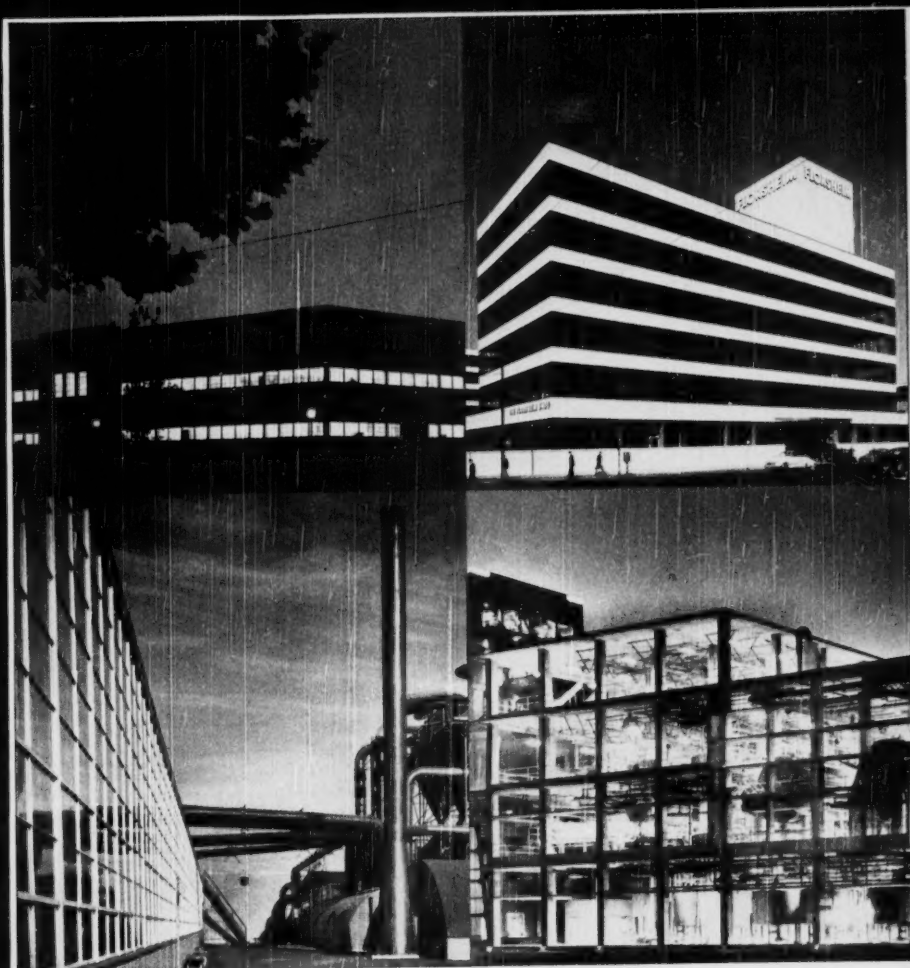
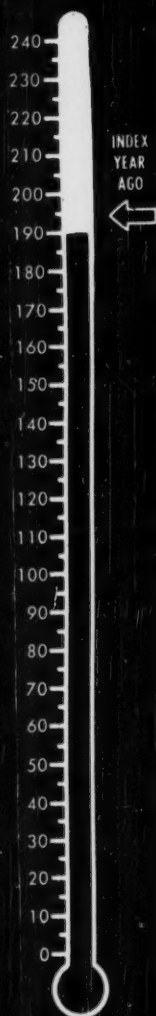


BUSINESS WEEK

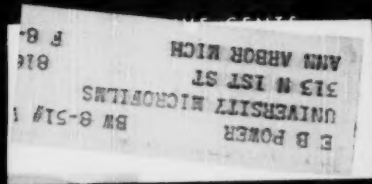
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The New Face of U.S. Industry: Special report to executives begins on page 55

A MCGRAW-HILL PUBLICATION

FEB. 25, 1950





Studebaker Land Cruiser

Your thrifty 1950 buy—a value-packed new Studebaker!

GET stand-out money saving in all your driving. Get a low, long, alluring 1950 Studebaker.

Its very build tells you why it's a marvel of a car in long-lasting thrift.

No bulging excess bulk! No wasteful surplus poundage! No needless extra burden to handicap the gasoline you buy!

That trim, sleek, vigorously rugged Studebaker structure does a real job of economizing for you. It saves your income from a lot of costly outgo.

And, plus all that, this refreshingly different Studebaker brings you the most distinctive "next look" and "next ride" in modern motoring.

Stop in at a showroom. Check up on the amazing value all the way through a new 1950 Studebaker Champion, Commander or special extra-long-wheelbase Land Cruiser. Go for a drive!

NEW 1950 STUDEBAKER

The stand-out car in thrift and value!

White sides all time and wheel discs optional at extra cost



Long-wearing nylon upholstery is standard in the 1950 Studebaker Land Cruiser shown—and in all regal de luxe Commanders. Top-quality interiors distinguish even the very lowest priced Champions.



Gasoline goes such a long way you never worry about doing a lot of driving behind a thrilling, higher compression 1950 Studebaker engine. Automatic overdrive is available at extra cost for extra thrift.



The extra safety of extra vision is one of the extra values in the new 1950 Studebakers. A clear view ahead, alongside, behind! Glare-proof "black light" instrument panel illumination for night driving!



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Koroseal passes screen test

A typical example of B. F. Goodrich product development

HE'S "tacking" a screen but the frame is metal. He does it by using a spaghetti-like tube of Koroseal.

When a manufacturer first had his idea for this new-type screen, he knew he must find a material that would lock the screen in the channel without cutting, that would be flexible enough to push in place easily, and pull out just as easily to replace worn screen. It had to stand sun, air, moisture, all sorts of weather, as long as the metal frame itself. Koroseal met all those demands. ● Yet this is only one of hundreds of things Koroseal can do. For example,

it may give some product a new package—one that's strong, can be transparent or in any color or pattern. One that can be heat sealed, to itself, or laminated to other materials.

It may give some product a new finish—one that's colorful, pleasant to the touch, soft, tough, easily cleanable. Because it's virtually scuffproof. Koroseal looks new long after other materials look scratched and worn.

Koroseal flexible material can be made in sheets, films, coatings, tubes, almost all shapes and sizes. It can be applied to other materials. It takes a

high fire-polish gloss, or a rich grain. In most forms it resists flame—it won't burn unless you hold it directly and continuously in flame.

Chances are this versatile material can make your product better and more sales-worthy. We'll be glad to work with you, supply samples for experiment, and our technicians will work with yours. Just write: *The B.F. Goodrich Company, Koroseal Sales Department, Marietta, Ohio.*

Koroseal—Trade Mark. Reg. U. S. Pat. Off.

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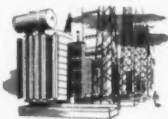
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New Equipment Cuts Costs in Power Generation, Distribution . . .



Allis-Chalmers "Unitline" series of standardized designs (turbines of 11,500 kw and larger) offers clean, attractive lines. New units are highly self-contained for simplified installation, inspection and maintenance.

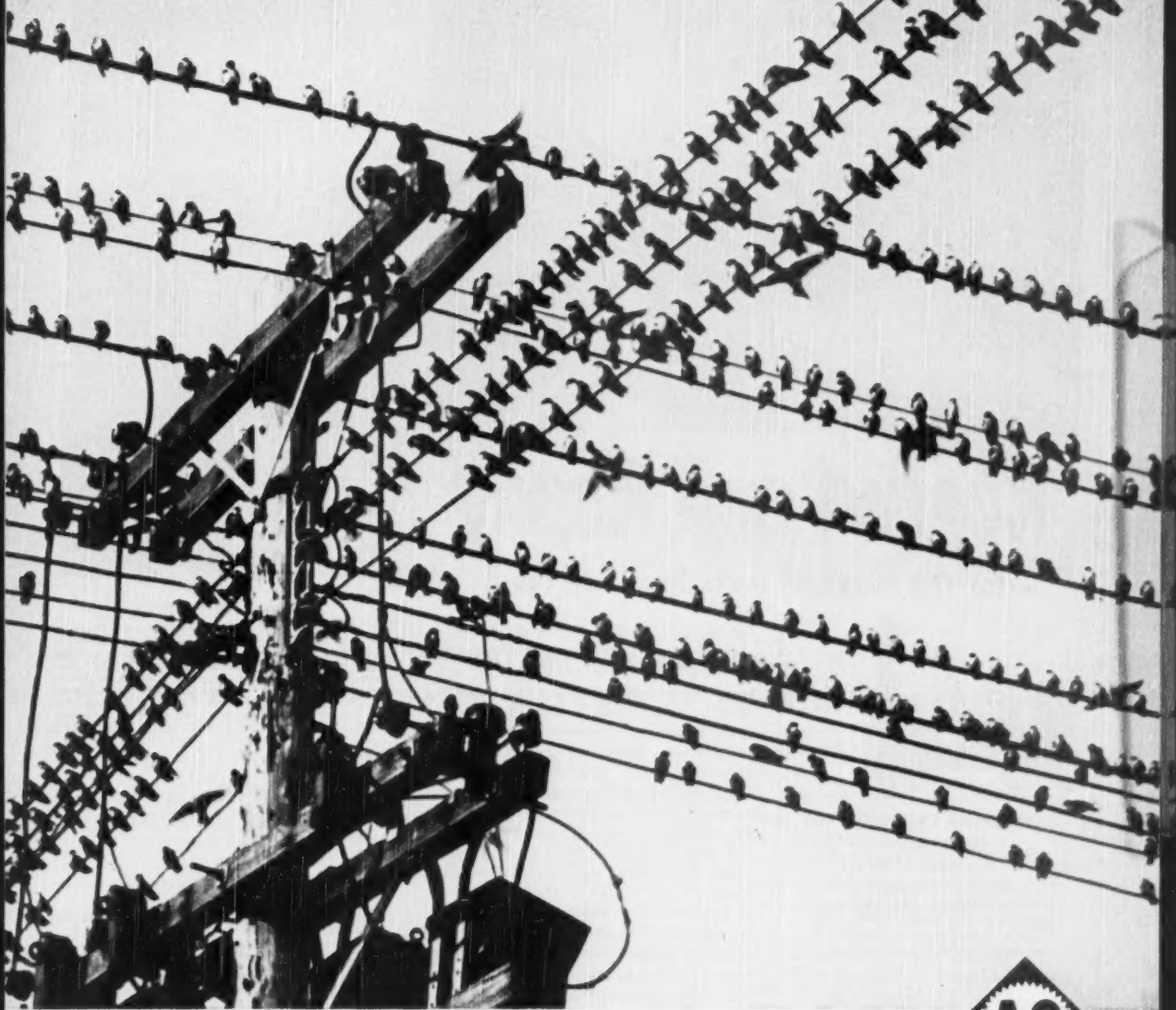
Higher steam pressure requirements of modern turbine generating plants are met by this new A-C barrel-type boiler feed pump. It offers high efficiencies, with traditional Allis-Chalmers reliability.



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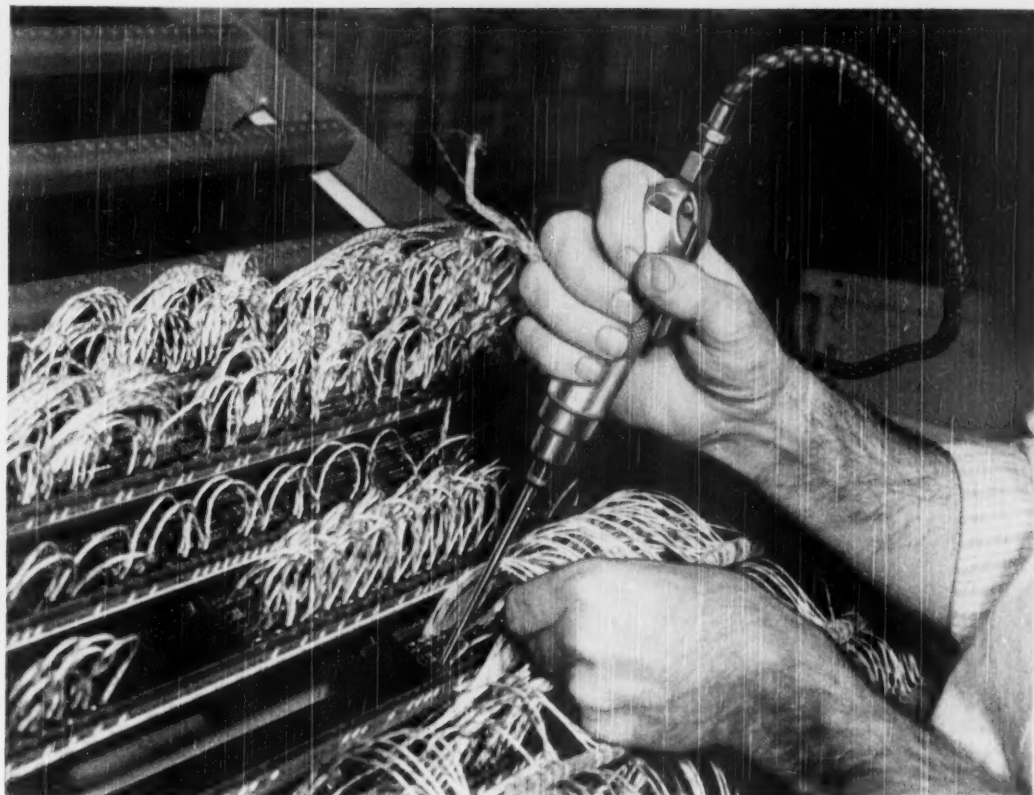
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BUSINESS WEEK • Feb. 25, 1950



65% GREATER PRODUCTION WHEN HAND POWER GIVES WAY TO AIR POWER!

AN ADAPTATION OF KELLER AIR TOOLS

During assembly of business machines, workers' hands move laboriously in slow rhythm as they push terminal plugs into plug boards.

In one hand they hold a tool like a screw driver with a holder on the forward end to push plugs into position. The job was well done, but the constant drive with the hand tool was mighty tiring and slow.

Keller engineers, alert to relieving fatiguing operations, suggested the use of a standard Keller pin riveter. These little 13-oz air tools deliver just the gentle impact necessary to drive the plugs into place.

So special slotted sets with convenient power control were developed for the plug board assemblers. Today, plants using the sets report plug-driving

speed up 65%, operator fatigue eliminated.

If you have an energy-wasting job that is slowing up production, investigate applications of special Keller tools. They cure production slow downs and operator fatigue at the same time.

★ ★ ★

In addition to specially designed air tools, Keller's standard line of air hoists, screwdrivers, nut setters, die grinders, chipping hammers, and other work-saving power hand tools are speeding production on a low cost basis.



Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

AIR MOTORS • AIR HOISTS • AIR HAMMERS • COMPRESSION RIVETERS • GRINDERS • DRILLS • SCREW DRIVERS • NUT SETTERS



You've probably seen her dozens of times in as many different guises. She's the versatile *Miss Ethylene* Dichloride of Wyandotte, Michigan.

A close cousin of the well-known Wyandotte Glycols, ethylene dichloride is an important ingredient of tetraethyl lead for "anti-knock" gasoline. It is also used by petroleum refiners for the dewaxing of oils as well as the de-oiling of wax.

In the chemical industry, this clear, colorless liquid is a valuable extractant and swelling agent. It is often useful as a solvent for oils, greases, fats and other organic com-

pounds. Because of this latter property, ethylene dichloride lends itself readily to the preparation of such widely diversified products as paint removers, metal cleaners, dyestuffs and extractant food flavors.

Thanks to its unique and varied characteristics, ethylene dichloride has many other known uses, many still undiscovered. We will be glad to discuss with you the "personality" of this truly amazing chemical and its application to your particular products or processes. Just write:

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Wyandotte Chemicals Corporation is one of the world's major producers of soda ash, caustic soda, bicarbonate of soda, chlorine, dry ice and calcium carbonate. Wyandotte produces glycols and related compounds, certain aromatic sulfonic acid derivatives and other organic intermediates. Wyandotte is also the world's largest manufacturer of specialized cleaning compounds for business and industry.



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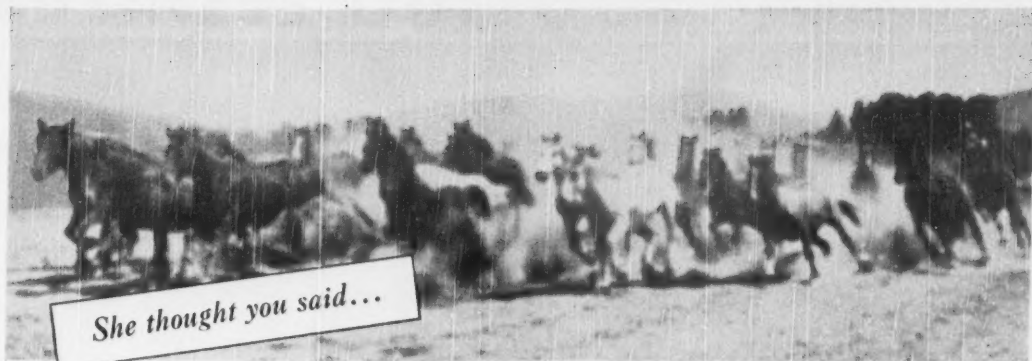
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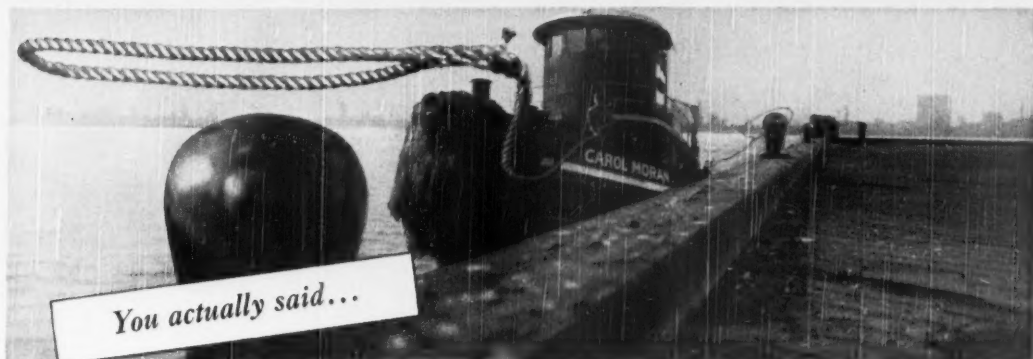
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You actually said...

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Sounds like *s, z, f, th* ordinarily are difficult to catch when transcribing. Edison's electronic Ear-Tuned Jewel-Action—reproducing thousands more cycles per second than any other dictating instrument—faithfully preserves these "high-frequency" sounds

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INDUSTRIAL EYE ACCIDENT COSTS UP 78½% SINCE 1939

Profits Go Up...
Operating Costs Go Down...
when you eliminate High Eye Accident Costs
from what you make and sell!

High eye accident costs can affect your operations adversely two ways: (1) They represent an unnecessary cost that inflates your selling price and hence cuts your volume (2) They lower efficiency through increased unproductive time, idle machine charges, replacing key men with substitutes and by impaired worker morale. All this in addition to the direct costs for first aid and medical care.

Yet unlike other high costs that plague management today—these can

be cut. How? By establishing an AO Eye Protection Program which can pay for itself in less than six months' time. Your AO Safety Representative can prove with case histories that an AO Program works — that goggles costing about \$2.30 can save sums up to \$44,000 annually! Ask him to call.



FACTS TO REMEMBER — Eye accidents cost industry over \$5 per employed worker per year — over \$328 in compensation per injured man — are 98% preventable.

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BUSINESS OUTLOOK

BUSINESS WEEK

FEBRUARY 25, 1950



Major strikes are still inflationary. At least, that's how businessmen seem to size them up.

There's no other explanation for the way optimism thrives in the face of this growing coal crisis.

Industry thinks the pattern of the 1949 steel strike will repeat.

Last fall's shutdown wiped out inventories up and down the line. When production started up again, there was a rush to rebuild stocks. This replacement boom gave business a flying start into 1950.

•
Steel makers were close to the bottom of their coal piles this week.

Operations were at 88½% of capacity as the week started. But major producers forecast deep cuts if coal wasn't moving by weekend.

Yet they see nothing but good business ahead through most of 1950. The coal strike may shut them down. But they are convinced their orders will keep until they are able to reopen.

•
Conversion deals in steel are very much in the picture.

Steel users keep scrambling for sheet and strip. Now, what with the coal strike, they are paying through the nose—more so than in months. They want insurance.

One unintegrated steel mill says its schedules are filled up; it won't book any more conversion business for the next six months.

•
Steel scrap prices are firmer—on the eve of an industrywide shutdown.

Here's why: When the industry is short of coal, it banks the blast furnaces that make pig iron. Then, with pig short, steel makers charge their open hearths with more scrap.

•
Washington doesn't agree with the average businessman's rosy picture of the second half of 1950. Government experts are worried about purchasing power and unemployment—in an election year (page 15).

And you must remember that business sentiment can turn around fast.

The 1949 recession blasted some of the brightest forecasts industry has ever made for itself.

•
Few years have started out as promisingly as 1950. The boom was even lusty enough to push business loans up against the seasonal pattern.

Usually, bank loans to business go down in January and February. Retailers and wholesalers pay off loans that carried Christmas inventories.

•
Rising business borrowings suggest that manufacturers are building inventories again. Their borrowings apparently more than offset the pay-backs by retailers and wholesalers.

In 1949, the seasonal drop in business credit turned into a general liquidation. From December to mid-July, business loans of reporting member banks of the Federal Reserve System shrank almost \$3-billion.

This year, business loans on Feb. 8 topped the end-of-December peak.

•
Rising loans mean a general rising trend in bank deposits. That will be at least mildly inflationary.

There's a catch, though. Too fast a rise in the money supply would

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
FEBRUARY 25, 1950

start the Federal Reserve Board clamping down. FRB and the Treasury already are edging, almost imperceptibly, toward tighter credit.

Housing's greatest boom of all time roared through its seventh month in January. With 80,000 houses started, it was the biggest January ever.

The total number of dwelling units started was 654,300 for the seven months. That ran 150,000 units or 30% ahead of the same period a year earlier. The only seven months that have come close to it were the middle months of 1948 with 637,800 starts.

But that 1948 record was set in the summer. The current record-breaker is the more remarkable because it is bucking winter weather.

February started out with home building continuing the unusual activity of earlier winter months, the Bureau of Labor Statistics notes. But it was almost too much to hope that weather would stay favorable.

Progress on housing is more important to people waiting to move in than the starts themselves. But the high rate of starts is a progressive thing: Today's starts will be tomorrow's completions.

Thus, home building, measured by value of work put in place, also was high in January. The total of \$650-million, though a bit under December, compares with \$475-million a year earlier—a gain of 37%.

If the slowly mounting value of publicly financed housing were added, the gain over a year ago would be even larger.

Construction economy note: Fewer workers continue to do more work.

Total construction work done in January is valued at \$1.5-billion against \$1.3-billion in the same month last year, up 16%.

Yet the number of workers employed in contract construction was 1,992,000, about 25,000 fewer than a year ago.

Employment in manufacturing, although still substantially below a year ago, continues to narrow the gap.

This week's Bureau of Labor Statistics estimate puts factory employment at almost exactly 14-million. That's only 800,000 under a year ago; not many months back, the lag was about 1½-million.

And another thing: Last year, business and employment were sliding. Manufacturing employment dipped 390,000 between December and January. This time, the December-January drop was only 61,000.

Cotton mills were more active in January than at any time since May, 1948. But January may have seen the top of the upswing (page 25).

Average daily mill use of cotton last month was 37,651 bales, the Bureau of the Census finds. That's up from the already very satisfactory 34,953 bales a day for December.

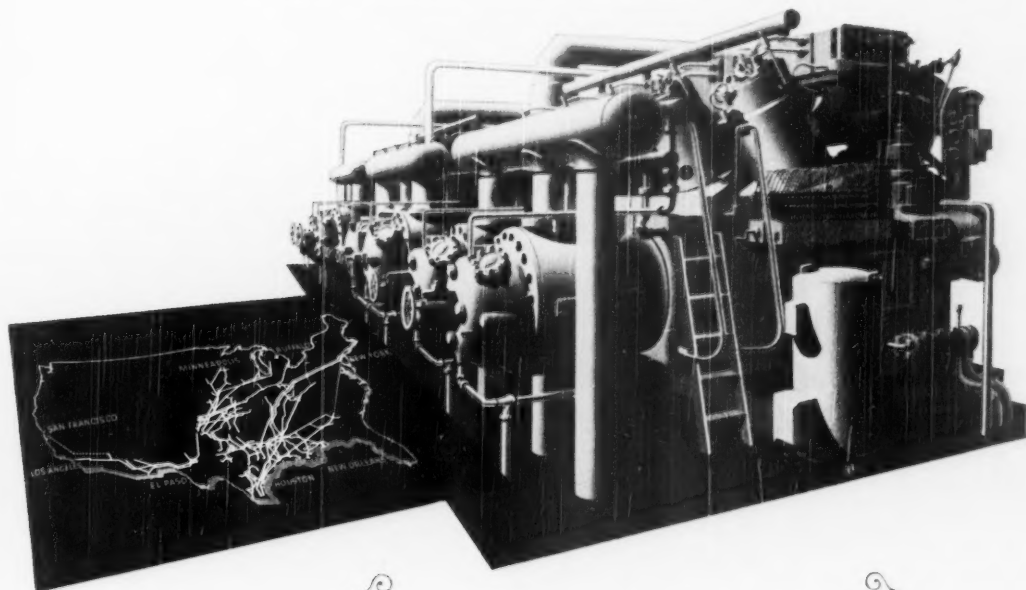
But there is talk in the trade of output outrunning needs.

Another upset may come in exports of cotton cloth. These ran very high through last September. But, in October and November, following the widespread currency devaluations, cloth exports dropped sharply.

Later figures aren't available. But, if they show a further decline, this will spell the end of the lucrative postwar textile exports.

GULF SECURITY OIL

provides superior lubrication for pipe line compressor units,
helps prevent operating troubles



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with Gulf Quality Oils and Greases

Every year more miles of pipe and more high-powered pumping stations are added to the tremendous network which brings natural gas from Texas to Central and Eastern United States.

A single pipe line may be 1300 miles long, and have fourteen pumping stations, each equipped with ten 1100-hp. gas-engine-compressor units. Many of these, like the units illustrated above, are 6-cylinder V-type engines connected to high-capacity compressors.

One of the first considerations of pipe line operators is dependable performance of engines and compressor units, in order to insure that the necessary gas pressure is maintained. Failure of one or more pumping units might result in a serious local pressure drop.

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Insulate hot water
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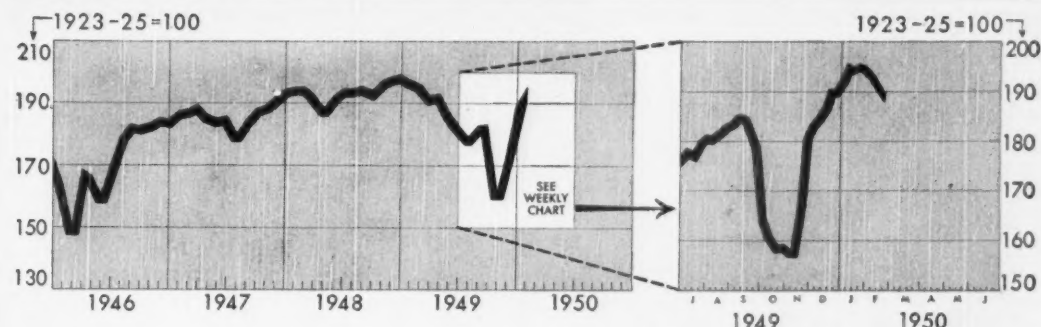
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AMERICA'S FAVORITE BUYING GUIDE FOR OVER 60 YEARS



FIGURES OF THE WEEK



Business Week Index (above) *189.9 †191.4 195.6 195.7 162.2

PRODUCTION

Steel ingot operations (% of capacity).....	88.8	90.7	93.9	100.3	97.3
Production of automobiles and trucks.....	125,936	†125,737	158,432	114,207	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$28,593	\$27,785	\$39,804	\$24,482	\$19,433
Electric power output (million kilowatt-hours).....	5,931	†5,971	6,041	5,650	3,130
Crude oil and condensate (daily average, 1,000 bbls.).....	4,956	†4,951	4,962	5,418	3,842
Bituminous coal (daily average, 1,000 tons).....	417	1,090	1,237	1,907	1,685

TRADE

Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars).....	69	67	67	72	86
All other carloadings (daily average, 1,000 cars).....	26	35	39	44	52
Money in circulation (millions).....	\$26,993	\$26,985	\$27,121	\$27,480	\$9,613
Department store sales (change from same week of preceding year).....	None	-1%	-5%	None	+17%
Business failures (Dun & Bradstreet, number).....	218	195	231	180	228

PRICES (Average for the week)

Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100) . Jan. 166.9	167.5	170.9	105.2
Spot commodity index (Moody's, Dec. 31, 1931 = 100).....	357.2	†357.6	353.1	374.0	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	220.8	†220.4	222.4	268.6	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	303.1	†303.2	300.7	293.4	146.6
Finished steel composite (Iron Age, lb.).....	3.837¢	3.837¢	3.837¢	3.717¢	2.396¢
Scrap steel composite (Iron Age, ton).....	\$27.42	\$27.08	\$26.75	\$37.25	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	18.500¢	18.500¢	18.500¢	23.500¢	12.022¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$2.23	\$2.20	\$2.21	\$2.20	\$0.99
Sugar (raw, delivered New York, lb.).....	5.51¢	5.61¢	5.78¢	5.62¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	32.30¢	†31.99¢	31.12¢	32.65¢	13.94¢
Wool tops (New York, lb.).....	\$1.783	\$1.793	\$1.842	\$1.633	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	19.67¢	†19.31¢	18.19¢	18.50¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	136.2	†136.3	134.0	117.1	78.0
Medium grade corporate bond yield (Baa issues, Moody's).....	3.24%	3.24%	3.23%	3.46%	4.33%
High grade corporate bond yield (Aaa issues, Moody's).....	2.58%	2.58%	2.57%	2.71%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	14-14½	14-14½	14-14½	14-14½	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	14-14½	14-14½	14-14½	14-14½	4-8%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	N.A.	47,290	48,245	46,079	†127,777
Total loans and investments, reporting member banks.....	N.A.	67,110	67,670	61,991	†132,309
Commercial and agricultural loans, reporting member banks.....	N.A.	13,885	13,861	15,265	†16,963
Securities loans, reporting member banks.....	N.A.	1,896	1,851	1,766	†1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks....	N.A.	37,354	38,131	32,890	†115,999
Other securities held, reporting member banks.....	N.A.	5,236	5,084	4,260	†14,303
Excess reserves, all member banks.....	1,040	820	910	606	5,290
Total federal reserve credit outstanding.....	18,581	18,146	18,383	22,926	2,265

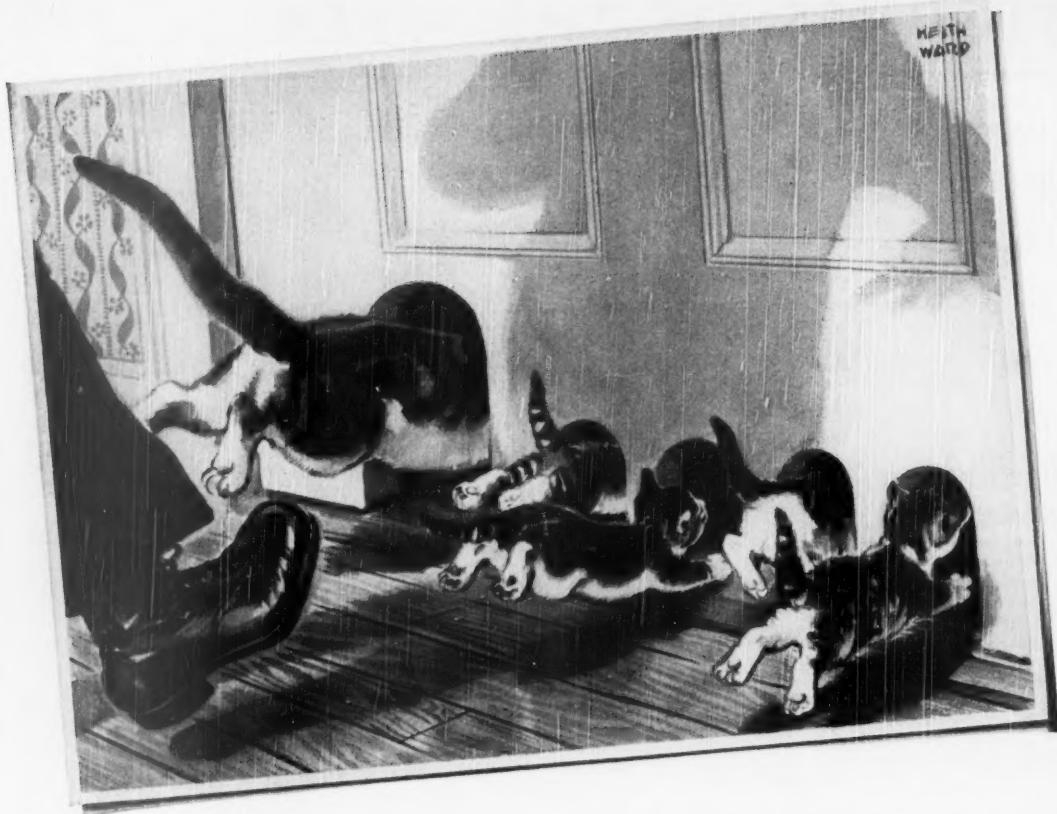
*Preliminary, week ended Feb. 18.

††Estimate (BW—Jul. 12 '47, p.16).

‡Date for "Latest Week" on each series on request.

†Revised.

N.A.—Not Available.



"EVER HEAR THE STORY ABOUT THE FIVE CATS?"

Jake, our foreman, told us the story the day he found us shooting the breeze on the job. We wanted to know something—and we wanted to know bad. We'd seen an insurance man around the plant, and now some guys were sledging out the wall right in the side of the building. Why? For a door? A door leading nowhere? It just didn't make sense.

"Listen, you guys," Jake said. "I'll tell you about that hole—and then you get back to work. Ever hear the story of the five cats? Gent had a cat—and he cut a hole in the side of the wall so the cat could get in and out. Then, like cats do, she had four kittens and he cut four more little holes beside the big one.

"Friend of his said, 'Listen, Joe, you're crazy. One door's enough for them kittens.'

"Not in this house," says Joe, "When I say scat, I mean SCAT!"

Well, we were dumb, I guess. We still didn't get it. "Ever think what would happen if there was an explosion over there in the paint shop?" Jake asks. "You guys would jump a mile—and then you'd start running. But where? Only place you could run is back through the paint shop. See what I mean?"

We saw.

So then Jake says, "Now don't get me wrong. There ain't going to be an explosion. Not with all them ventilators and stuff they've put in. But the old man ain't taking any chances.

So he's sinking fifteen hundred bucks in that door. And for what? To keep you guys safe. Now, will you get back to work?"

* * * * *

You won't find the words, catastrophe survey, in a Workmen's Compensation Insurance policy. Seeing that these surveys are made when needed is just one of the many ways Liberty Mutual is cooperating with management and labor to keep workers safe on the job.

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WASHINGTON OUTLOOK



ANTITRUST OBJECTIVES, long range, are beginning to come into focus.

Thus far, there's no clearcut statement of where the Truman Administration is heading. But out of the election-year clamor against monopoly, this trend of thinking is showing up among more of Truman's men:

Business bigness—private bigness—is inherently bad. So the government should step in, break up the big integrated companies, or—where this is impractical for economic or defense reasons—police price and production policies.

You will see the case against bigness unfold in a series of reports which the Federal Trade Commission will publish over the next 12 months.

The top 500 manufacturers will be listed, with figures on the share of production each has in various industries.

Tie-ups between big companies, through interlocking directors and stock ownership, will be spelled out. The idea is to show that such close associations tend toward common policies.

Cartel connections abroad, especially in the petroleum industry, will be reported. FTC will emphasize the impact of this on companies which operate entirely within the U. S.

An index of concentration is a project which the commission wants to put on an annual basis. It would show the yearly change in assets and production for the 200 biggest corporations.

There will be no quick action on such an approach to bigness. This year you'll find only pressure for the antimerger bill and stiffer penalties for antitrust violators.

The bigger issue will be raised next year—if Truman is successful this fall in electing a House and Senate more favorable to Fair Deal theories.

AN FTC TURNDOWN OF STEEL on the basing-point compromise is expected.

Last fall, it looked as if the commission would issue a formal ruling that freight absorption to meet competition is O.K.—so long as it is not used to lessen competition unlawfully. A commission attorney had worked the ruling out with the steel industry, and tentatively approved it.

But the latest word out of the FTC is that the compromise probably will be rejected. Feeling is strong among the commissioners that the ruling

would not close the door to the basing-point abuses which the FTC is trying to stamp out.

MORE POWER FOR SEC has a better than even chance of being voted this year.

This is the Frear bill (page 105) which would bring unlisted companies with assets of at least \$3-million and 300 or more stockholders under the commission's regulations.

It will mean an increase in the record-keeping costs of some of the smaller companies. But it's aimed primarily at such big companies as Alcoa and A & P. The SEC wants to force them to tell more about their finances.

SMALL BUSINESS will get a better chance to bid on defense contracts.

The plan now is to set up procurement information centers in a score or more cities. Each office will receive daily every bid invitation put out by some 60 Army, Navy, and Air Force buyers. The invitations will be available for inspection at the offices and will be summarized for use of local trade associations.

The plan is to get the offices going within the next 30 to 60 days. The list isn't out yet.

LABOR UNION PRACTICES are coming in for a show of attention in Congress.

A Senate Judiciary subcommittee is looking into industrywide bargaining during hearings on the Robertson bill (which would make unions subject to the antitrust laws). But even the bill's most ardent supporters see little chance for action this year, despite the coal tie-up.

Another Senate group, the Humphrey committee on labor-management relations, will get going within a month or so, will show a more friendly spirit toward the unions.

The Humphrey group is out to defend industrywide bargaining, legalize hiring halls, prove that the Taft-Hartley act is unworkable and should be repealed.

Nothing will come of its efforts, either—this year. But it will point up for the unions what they can expect of Congress next year, if they help knock off Truman opponents this fall.

TRUMAN'S CONFIDENCE in his political strength is shared by party leaders.

Some of them don't like the course he is steer-

WASHINGTON OUTLOOK (Continued)

ing. This is especially true with Congressmen.

House Speaker Rayburn, for example, is out of line on FEPC. Senate Leader Lucas is frequently out of step, especially on farm legislation.

And thus far none of the Truman stalwarts in Congress has come forward to champion government medicine or the Brannan plan.

But by and large, the party leaders string along with Truman. They think he has the popular side of most issues—the appeals to the big voting blocs. They figure he can keep the Republicans on the defensive through the fall elections.

In the Washington winter book, the Democrats are rated an odds-on favorite to hold the House and Senate. Campaign contributors seem to accept this. Democratic money is rolling in, while the Republicans still find the pickings slim.

•
THE POSTAL RATE RISE faces a delay in the Senate. But it probably will pass in the end.

Chairman Johnston of the Post Office and Civil Service Committee wants to hold hearings on the House-approved bill. It would hike postal rates some \$130-million. But the Administration is opposing this move. Its backers say hearings aren't necessary, since the committee covered the ground thoroughly last year.

There's no doubt that the bill will be passed, once it gets on the Senate floor. The rise in rates would hit all users of mail, except first class.

•
NO QUICK RISE IN ARMS MONEY is likely as a result of U. S.-Russian tension.

There's considerable agitation within the Army, Navy, and Air Force for more funds. The services feel Defense Chief Johnson is holding too tight a rein. But thus far there's no sign he'll give in.

Congress, however, probably will tack on as much as \$1-billion extra, primarily for the Air Force. The talk is of requiring Truman to release some of the plane-procurement money he impounded last year when Congress upped his budget estimate.

•
The Administration is worried over rising sentiment for peace talks with Russia (page 127). It has weighed such a move for a long time, and decided against it. Its conclusion was that nothing worthwhile is possible now.

Congress won't force the State Dept. to negotiate. But even the threat of this shows that State

has done a poor job of selling here at home. State knows this now, belatedly. Secretary Acheson will make an effort to repair the damage with a series of addresses.

•
TRUMAN'S HOME POLICIES will shift a bit by spring to put more steam behind things which are regarded as business boosters.

One reason is that his economic advisers are not so optimistic as many businessmen about second-half prospects. Another is that his political planners want everything possible done to avoid any downturn which might hurt at the November polls.

No new rabbits will be pulled out of the hat. But you probably will see Truman back away from legislation which might unsettle business. Instead, he will center his efforts behind spending and lending legislation.

•
A corporation tax increase is likely to be forgotten. Congress is against it, anyhow.

Credit controls seem headed for discard, too. Neither revival of instalment sales curbs, nor more power for the Federal Reserve Board over bank credit, will be pushed to passage.

Housing aids, however, will get a real shove—the so-called middle-income bill for easy financing of co-ops, apartments, and low-priced individual homes.

Aid to small business will be moved closer to the top on the must list. Truman will get a liberalization of RFC loans, but the capital bank idea is still in doubt.

Defense of spending will be along this line: Economy cuts would slow business down.

•
THE UNEMPLOYMENT HEADACHE is bigger than official comments indicate. The hope at the turn of the year was that business would rise fast enough to keep unemployment from becoming either a severe drag on the economy or a hot political issue. Fingers were crossed that the jobless would stay under 5-million, which is regarded as the "danger" line.

That hope is wearing thin. Seasonal factors account for only a part of the estimated 4.7-million out of work this month. The expectation among Truman men is that the "danger" point will be reached in June or July, and that now—not then—is the time for the Administration to start working against it.

How to Turn a Mountain Inside Out



Photographed in West Virginia Coal Fields by William Vandivert

In a very real sense, the engineers shown here have to know the innermost secrets of a mountain, for it's their job to decide just how the coal locked deep in its heart can most economically and efficiently be mined. Indeed, the blocks they've laid out on a proposed mine plan represent thousands of tons of coal—and the strips, the conveyors that will move it out to the modern surface preparation plant fast.

Today's progressive mines are planned for years ahead by mining engineers. Through advance surveys, they "engineer" around the "faults" in coal seam formation, plan transport, ventilation and pumping systems, design entries and haulage ways. But that's only the "underground" part of their job. For besides the expense of opening a mine, coal producers must also provide million-dollar preparation plants and all railroad, power and other facilities that go with them. Only because of development work and capital expenditures, however, are America's coal mines the most productive, efficient and safest to work for in the world.

Today many coal buyers order coal "made" to their own special standards. They specify various qualities such as grade, and the amount of carbon, volatile ash and sulphur content. Some even require that coal be treated with special oils to aid combustion. Modern mines—thanks to million-dollar preparation plants—are able to supply users with coals custom-designed to increase the efficiency and performance of even older boilers. Often these prepared coals make it possible for the user to produce more needed steam, heat or power without expanding or replacing existing combustion equipment.

BITUMINOUS COAL

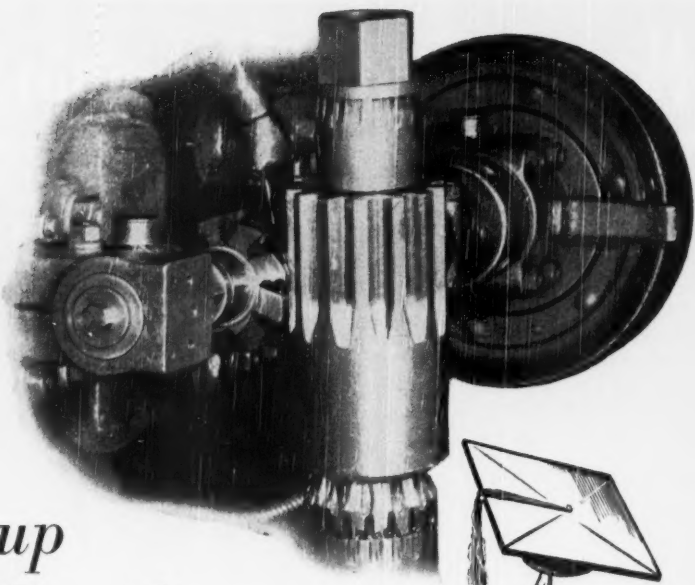
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A DEPARTMENT OF NATIONAL COAL ASSOCIATION

WASHINGTON, D. C.

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AGING John L. Lewis is about ready to step aside, but even so . . . MINERS are men apart, militant the world over; that means . . .

Trouble in Coal, Lewis or No Lewis

John L. intended to resign this month, has postponed it until October. But UMW will be militant and unpredictable still.

If the coal dispute had been settled last month, John L. Lewis would today be ex-president of the miners.

The miners union constitution has a provision (Lewis put it there) requiring officers to retire at the age of 70. Lewis was 70 on Feb. 14. He had been looking forward to the gesture of turning over his office to Thomas Kennedy, UMW vice-president.

• **Heir Apparent**—Kennedy, a mild-mannered, pipe-sucking man and an expert on UMW bookkeeping and finances, has no real desire to move into Lewis' vast and paneled office at UMW headquarters. His friends say that if the presidency is thrust upon him, he won't move from his desk in the smaller office where he now sits; he would leave the Lewis chambers open for the big man's convenience whenever he wanted to rumble in.

That's symbolic of the Lewis-Kennedy relationship. Unlike Philip Murray, who declared his independence of Lewis after Lewis handed him the presidency of the CIO, Kennedy would con-

tinue to let Lewis run the union just as much as his mentor desired to.

• **Or Palace Battle**—These very qualities in Kennedy make him an unlikely contender for the presidency should Lewis leave the scene before naming a successor. In a sharp battle for the top job, UMW secretary-treasurer John Owens is the man worth betting on.

Tough, shrewd, able, and ambitious, the Welsh-born, 60-year-old Owens may not receive the personal affection Kennedy does from the ranks, but he has attributes worth more in the Donnybrook of an open UMW election fight.

• **Retirement Postponed**—But all this remains in the future book: Lewis had to change his mind about resigning immediately on reaching three score and ten. Persistence of the impasse in contract negotiations with the operators, the entry of his old adversary Truman into the dispute, and his own involvement with the courts made the difference.

UMW's international executive board reflects Lewis' views the way a

corporation's board of directors reflects the views of a chairman who owns 51% of the voting stock. It voted an "exception" to the constitution. Lewis will remain president of UMW until the union meets in biennial convention next October—barring the intervention of Providence. In October, Lewis intends to turn over the presidency to Kennedy.

• **And Then What?**—A large section of the business community which knows the labor crises of the coal industry only through newspaper headlines figures that Lewis is the key to its troubles. Even some of the coal operators—who have been exposed to Lewis' blustering and bullying—have come to identify him as the source of their afflictions. But those who can be impersonal enough about Lewis' forbidding personality to look at the problem of coal and the coal miners in a larger setting say this:

Lewis or no Lewis, mining will always be the nation's most nettlesome labor area.

The world over, there is something in the nature of mining and miners which make them problems. The Nazi labor front was able to break the independence of the whole German

union movement—with one exception. The only strikes which ever seriously troubled Hitler were in the Silesian and Ruhr coal fields.

Stalin outlawed strikes and knows how to use terror to enforce his prohibitions, but he is supposed to have had to crush walkouts and protests in the Donbas mines.

Britain, during the war, had only one continuing union problem. It was with the National Union of Mineworkers which insisted on its right to strike.

Long before Lewis took over the direction of the American miners, they had the most militant and unpredictable union in the country. Lewis seems to have suited them right down to the pit bottom. And when he leaves them, the odds are they will go right on having the most militant and unpredictable union in the country.

• **Man Apart**—Many of the problems which made the issues in this winter's strike can be dealt with effectively. How much pay the miners should get, how their superannuation and disability should be handled, how long they should work—such matters are negoti-

ated peacefully to settlement in other industries and can be negotiated in coal. Even the pricklier problems—how much freedom of action the union can reserve to itself and how it can participate in “stabilizing” the industry—can be agreed on eventually.

But no agreement will ever make the inside of a coal mine a congenial workplace. No contract will ever relieve the embittered miner of the idea that he is a man apart. And no new leadership of the United Mine Workers will last long unless it gives the miners the opportunity to assert their independence by periodic battles with the management. Nor does it make much difference, as British experience has shown, whether that management is private or government.

• **And Trouble**—Until the mines are completely mechanized and work underground is obsolete—or until the threat of atomic warfare drives the rest of industry underground along with the miner—coal will provide labor crises.

Nor even Lewis, nor the ambitious younger men in his union who would like to wear his mantle sometime, can

say today what issues these crises will turn on. But, real or synthetic, issues there will be. And trouble. After Lewis the mineworkers union will not be very much different from what it has been in the past.

More Competition for Potash Industry

The potash business at Carlsbad, N. M., is moving over to make room for a newcomer there. Duval Texas Sulphur Co., newly named Duval Sulphur & Potash Co., plans a \$7.5-million plant in the town. It will take about two years to build the plant.

But the new setup won't quite put Duval in the potash big-time. The Big Three at Carlsbad are International Minerals & Chemical Corp., U.S. Potash Co., and Potash Co. of America. International is way out front—with bigger output than the other two combined. Duval will produce about half what each of the other two turns out.

• **Output**—That production will put Duval in fifth place. Official figures estimate total U.S. output, valued at some \$37.8-million, at roughly 1.1-million short tons of equivalent potassium oxide in 1949 (the potash trade figures output in terms of potassium oxide content though it doesn't produce the stuff in that form). The Big Three accounted for about 80%, American Potash & Chemical Corp., Trona, Cal., about 18%. On an estimated 1.2-million short tons, Duval expects to produce between 10% to 15% of equivalent potassium oxide in potassium chloride.

One report has it that Duval has leases on 14-million tons of ore underground in the Carlsbad region. Stearns-Rogers Mfg. Co., Denver, is said to have made preliminary estimates for a flotation plant for the company.

• **Demand High**—Most big potash producers knew what Duval had on the fire. But with demand for fertilizer shooting up, the industry feels Duval's contribution won't cramp their style. It will take about 700,000 tons of potash to meet the needs of the peak planting season, between Jan. 1 and Apr. 15. A strike at the Big Three plants slowed production until recently. It looks as though the industry may run short by about 150,000 tons.

To finance the new plant, Duval has an SEC authorization to increase capital stock to 1-million shares. The company, about 70% held by United Gas Corp., will borrow \$2.5-million.

• **Other Challengers**—Meanwhile, two other companies are eyeing the Carlsbad potash field. Southwest Potash Corp., a subsidiary of American Metal Co., and Freeport Sulphur Co. both have acreage under lease there.

	Total Cost of Living	Food	Clothing	Rent	Gas & Elec- tricity	Other + Fuels	Ice	House Furnish- ings	Misc.
August, 1939	98.6	93.5	100.3	104.3	99.0	96.3		100.6	100.0
January, 1941	100.8	97.8	100.7	105.0	97.4	104.2		100.1	101.9
January, 1942	112.0	116.2	116.1	108.4	96.7	111.8		118.2	108.5
January, 1943	120.7	133.0	126.0	108.0	96.8	117.5		123.8	113.2
January, 1944	124.2	136.1	134.7	108.1	96.0	122.7		128.3	118.4
January, 1945	127.1	137.3	143.0	108.3	95.5	123.6		143.6	123.3
January, 1946	129.9	141.0	149.7	108.3	93.8	127.2		148.8	125.4
January, 1947	153.3	183.8	179.0	108.8	91.9	142.1		179.1	137.1
January, 1948	168.8	209.7	192.1	115.9	93.1	174.6	131.2	192.3	146.4
January, 1949	170.9	204.8	196.5	119.7	95.5	191.8	139.0	196.5	154.1
February	169.0	199.7	195.1	119.9	96.1	192.6	140.0	195.6	154.1
March	169.5	201.6	193.9	120.1	96.1	192.5	140.4	193.8	154.4
April	169.7	202.8	192.5	120.3	96.6	187.8	140.5	191.9	154.6
May	169.2	202.4	191.3	120.4	96.9	182.7	140.1	189.5	154.5
June	169.6	204.3	190.3	120.6	96.9	183.0	140.0	187.3	154.2
July	168.5	201.7	188.5	120.7	96.9	183.1	139.9	186.8	154.3
August	168.8	202.6	187.4	120.8	97.1	183.1	141.1	184.8	154.8
September	169.6	204.2	187.2	121.2	97.1	185.9	141.5	185.6	152.2
October	168.5	200.6	186.8	121.5	97.0	188.3	145.6	185.2	155.2
November	168.6	200.8	186.3	122.0	97.0	190.0	146.6	185.4	154.9
December	167.5	197.3	185.8	122.2	97.2	191.6	145.5	185.4	155.5
January, 1950	166.9	196.0	185.0	122.6	96.7	193.1	145.5	184.7	155.1

+ Ice grouped with "other fuels" prior to 1948. Data: U. S. Bureau of Labor Statistics; 1935-39 = 100.

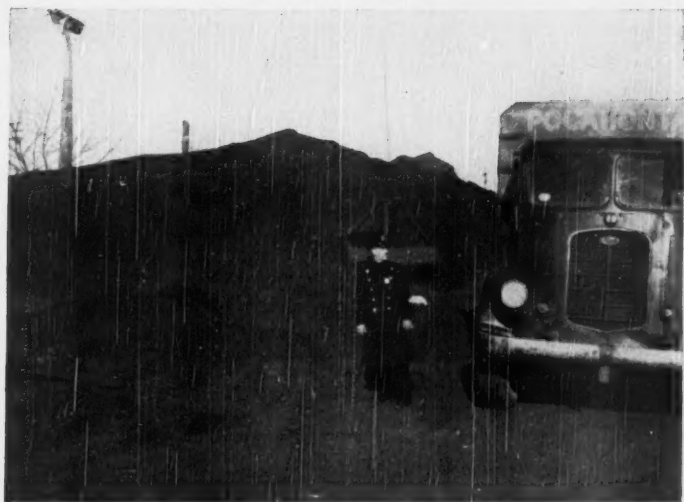
C.-of-L. Drop Cuts GM Wages

These cost-of-living figures mean: a 2¢ cut in wage rates at General Motors, heated demands for pay hikes at GM next April, and maybe even lower price tags on GM cars.

The 2¢ pay cut results from a drop in the BLS index to 166.9 in mid-January—in line with the GM-UAW contract signed in 1948. At that time GM gave the union

an 8¢ c.-of-l. increase—5¢ of which could be reduced if the cost of living dropped. The 2¢ pay cut (effective Mar. 1) dips into that 5¢ reserve for the first time since the contract was signed.

To get ahead of UAW demands for wage boosts next April, you can expect GM to counter by cutting car prices, attributing the move to lower wage costs.



LOCAL GOVERNMENTS across the country are moving to prevent hoarding, and . . .

Coal Shortage Hits Ironmaking

But that's about all. Coal-burning railroads are restricting service, laying off people; despite cold blast furnaces, steel production holds. Industries make out with stocks and nonunion coal.

The lights in Times Square are out again this week for the first time since the war. This time it isn't to keep enemy planes from spotting the area—it's part of New York's coal-rationing program. But if you needed coal for any legitimate reason in the state this week, you could get it.

With few exceptions, that's the story for the entire country—the much talked about coal crisis hasn't shown up so far.

Biggest exceptions are the railroads and the steel industry's blast furnaces. The furnaces use lots of coal all the time and can't switch to oil or gas. Thus, many have closed already and others are slated to close shortly.

At Pittsburgh, Jones & Laughlin was all set to begin banking all its blast furnaces in the area.

At Chicago, Inland Steel has five furnaces down, including one for repairs. That leaves three still operating. Youngstown Sheet & Tube shut down one "merchant" furnace at the beginning of the week, but grey iron foundries in the area weren't worrying—they have enough iron to keep them going into March. Republic cut coke production 25%, and that means coke oven gas is down, too. But it still can buy enough gas from outside sources to keep its Chicago-area steel production going.

At Birmingham, the picture looks darker. Twelve of the area's 20 blast

furnaces had been banked by midweek. U. S. Steel's subsidiary, Tennessee Coal, Iron & Railroad, had closed four of its nine; Sloss-Sheffield shut two of its four; Republic closed one of its four; and Woodward Iron shut one of three furnaces.

TCI also cut back coke output by 65%, others in the area cut by around 40%. But no open hearths had been closed yet.

In Ohio, Youngstown Sheet closed four of its six furnaces; Sharon Steel is operating only one of its three. But U. S. Steel's subsidiary, American Steel & Wire is running all its Cleveland plants at regular schedules—including blast furnaces. AS&W people say they "are not worried yet about coal."

In the Far West Kaiser Steel, at Fontana, Cal., has banked one of its two blast furnaces; and U. S. Steel's Geneva Steel, Provo, Utah, had to cut all its operations about 30%.

Through the rest of the country, the industry is pretty much following the same pattern. Bethlehem's Sparrows Point (Md.) plants are still running, but plans are being made to lay off about 1,000 workers and cut coke oven operations by 30%. Sheffield Steel, at Houston, Tex., is still operating at full schedule but figures on cutting operations shortly.

• **Basic Steel O.K.**—But even with this situation existing among the industry's

blast furnaces, steel production hasn't been hit hard at all. That's because steel companies can make up for pig-iron shortages by charging open hearths with a bigger percentage of scrap instead.

• **Railroads**—Across the country coal-burning railroads continue to cut back passenger service under the authority granted them weeks ago. Hardest hit are railways in the coal-producing states of the southeast; they are both coal burners and coal haulers. Norfolk & Western closed its Roanoke shops, laying off some 2,000 workers. The Baltimore & Ohio has laid off more than 5,000 shop workers, the Western Maryland about 1,500.

• **Coal Rationing**—Along with the Times Square brownout, New York State has a regular rationing setup, along wartime lines, to protect home heating. If you want coal, you have to show that you don't have any. Coal dealers have been forbidden to sell to unauthorized buyers.

Massachusetts and the District of Columbia set up similar rationing systems a few days after New York. Massachusetts' Emergency Solid Fuels Administration forbid dealers to deliver to anyone with more than a 7-day supply on hand.

• **Duquesne Light**—Pittsburgh's Duquesne Light Co. has cut its daytime power output by 20% because the low-grade coal it has been able to get won't give enough heat for full operation. But the company has been able to buy enough coal to maintain full service for residential customers and almost full service for industrial power users. Its subsidiary, Allegheny County Steam Heating Co., has asked buildings it supplies with heat to keep temperatures down.

Elsewhere, potential coal crises have been relieved by stand-by oil-burning equipment, by nonunion low-grade coal (BW—Feb. 18 '50, p21), and by informal rationing setups to prevent hoarding. In Boston, oil suppliers have even cut prices to speed up the switchover from coal to oil that has been going on gradually over the past few years, and very quickly of late.

• **Auto Overtime Off**—The auto makers are still operating pretty close to regular schedules, though Federal Motor Truck closed down, laying off 1,000. General Motors cut out some overtime operations and Ford is following suit. Packard will have to close down by Mar. 6.

Industry, in general, has been preparing for this kind of situation for some time, either with stand-by oil or gas equipment or with big coal stockpiles. Industrial coal supplies range from 10 to 30 days and some companies have even more. So most major companies still aren't in bad shape.



LOOK, ONE HAND! Standing on one block of plastic snow, worker balances another with ease; it's 97% air. Cut into shapes, it's display material.

The Plastic Snowman Cometh

Frosty styrene is moving beyond the Christmas tree onto the sales counter. Detroit firm fabricates containers for cosmetics, displays for a diversity of products, from autos to drinks.



STARS FALL from cutter's tool—designed for Xmas trees.



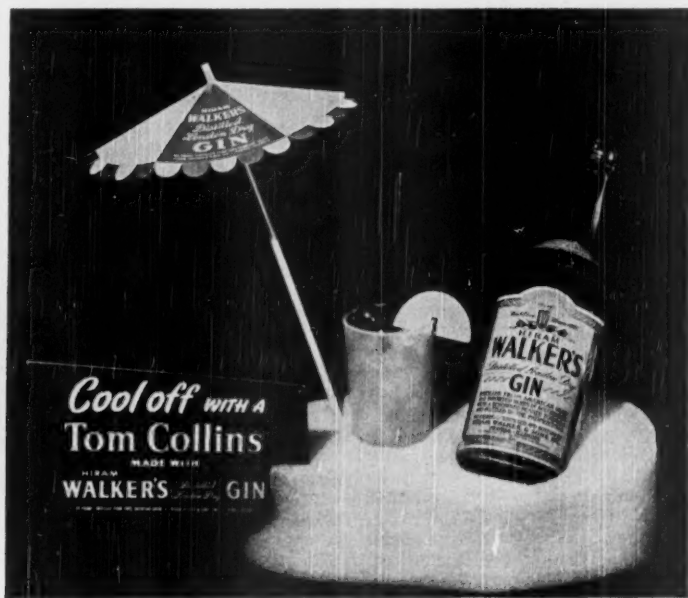
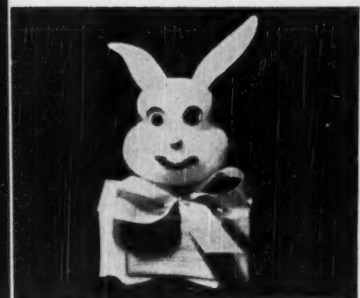
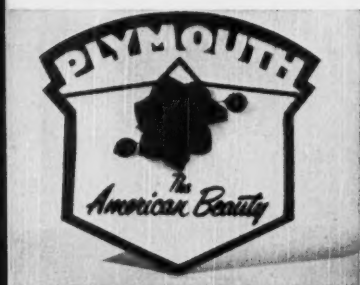
SNOWBALLS roll from specially adapted machines.

When you say, "Look at the snow!" at Schwab & Frank, Inc., Detroit, no one looks out the window. The snow is inside the shop, blowing up a considerable flurry. What started as a Christmas ornament is warming up sales displays—and sales—for several manufacturers.

Basic material of the stars and snowmen that roll out of Schwab & Frank's



SALES COUNTERS sparkle with snowmen containers, to sell Elizabeth Arden cosmetics. Take off the snowman's head and he's full of Blue Grass perfume. Packaging is a big field for Frostex, says Schwab & Frank.



AUTOS TO LOTIONS TO GIN:

The Frostex snowball rolls along. Seal promotes Plymouth car. Bunny tops Beauty Counselors' lotion bottle. Hiram Walker's setup in plastic lures the thirsty.

ting machines is Dow Chemical's extended polystyrene. That's plastic resin own up into a sort of petrified foam. "Frostex" is pretty, it's light, and it's tough. But it's too brittle to stamp. So the company adapted some special machines to cut it into shapes. The machines turn out 1,000 ornaments an hour. Schwab & Frank sold their first plastic

snowballs in 1946. This Christmas the company made more than 5-million ornaments, more than 30,000 bu. of snow. It even sells snow to Sweden—for movies.

But Christmas sales are seasonal, so the company looked for new outlets. The answer: odd-shaped gimmicks for displays, for fancy packages. Some of its uses are shown in the pictures.

Hot-weather salesmen like it because it looks cool. Beau Brummell uses "snowmen" to show off Palm Beach neckties. Seagram's snowy "7" advertises its Seven Crown whisky. A pop-cicle-mold manufacturer found using the material in colors stepped up sales.

Frostex is an insulator too—for breweries, refrigerators, even for blood plasma.

Lustron Goes on the Block

RFC's foreclosure means prefab builder is headed for public sale. RFC will probably pick it up, resell for what it can get. Likely buyer: a steel company. Likely use: building houses.

One morning last week, RFC's patience ran out. "We have withheld action for several weeks . . . nothing concrete has resulted . . . we can wait no longer." With that the government pulled the props from under Lustron Corp., the giant prefab builder.

This week RFC filed suit for foreclosure in Columbus (Ohio) federal court. Its charge: Lustron was in default on \$22-million of the \$37.5-million it owes the government. RFC asked the court to appoint a receiver pending sale of the company's assets.

• **More Houses**—What happens now? Best bet is that no matter how the foreclosure turns out, the Lustron plant will go on making prefabricated steel houses. RFC has already talked with several interested buyers. And all of them are interested in building houses.

Should the court O.K. foreclosure, it will set a date for public sale. Then anybody can bid. But it's fairly likely that RFC, which can bid up to \$37.5-million without putting up cash, will cop the prize. Its next step will be positive dickering with sales prospects.

• **Steel Companies**—In a closed meeting before the House Banking & Currency Committee, RFC told representatives that four groups have talked about buying Lustron for about one-fifth of RFC's investment. One committee member called the offers "not too substantial," said they ranged from \$7-million to \$74-million. None of the possible buyers has been identified, but signs point to Gunnison Homes, Inc., U.S. Steel's wood-prefab subsidiary, as one of the quartet. And talk still has it that Republic Steel Corp. is another bidder, even though Republic says it has "looked over Lustron and isn't interested."

Both Big Steel and Republic make sense as buyers. For Big Steel, getting Lustron would mean one less competitor for Gunnison. For Republic, it would mean a competitor for Gunnison. For either, it would mean a market for steel. And by supplying steel itself, either company could probably shave something off Lustron production costs—a stumbling block so far.

• **A Licking**—If RFC doesn't land a buyer for Lustron as a unit, it will have to sell piecemeal. In that case it would take about as bad a licking as it could get. Carl G. Strandlund, Lustron president, contends the only money would come from forced sale of machinery and inventory, and whatever cash is left

in the till. He says the machinery, much of which was made specially for Lustron, would bring only a fraction of its original cost on the auction block. One House committeeman says total assets come to only about \$14½-million, including \$12-million in machinery and \$2.4-million in inventory.

• **Strandlund Out**—Whatever else happens, foreclosure means the end of Strandlund control. For months RFC has wanted to get him out of the driver's seat. But every reorganization proposal that Strandlund offered left the reins in his hands.

Without blasting Strandlund di-

rectly, RFC made it clear where it thought the blame lay: "Lustron produces a good prefabricated house. It can make them in sufficient quantities, and there is a good market for that type of dwelling. Those things sound like elements for a profitable business, but Lustron just hasn't been able to get onto profitable ground."

• **\$14-Million a Month**—For the time being, Lustron is continuing to operate with about 1,100 employees. How much longer it can keep the wheels turning is anybody's bet. At the first of the year, the company had only about \$1.6-million cash on hand. And it is still losing better than \$500,000 a month.

Through most of last year, industry people figured Lustron had to ship an average of 700 houses a month to break even. In its best month—July—it only got up to 268. For the 20 months ended Dec. 31, Strandlund was able to ship a total of less than 2,000 houses.



What Happens After a Plant Blows Up?

The explosion came without any warning just before the noon hour. "The roof went straight up in the air," one eyewitness said last week. "Right under it was a big red ball of fire."

Inside the red brick Midland, Mich., building were the only existing production facilities for Dow Chemical Co.'s new and promising styrene and butadiene latex. Also inside were 30-odd workers. Eight were killed, 25 injured.

What steps does a company take after a disaster like this?

About its employee-casualties Dow could go into action. Company doctors and nurses, aided by town doctors, worked on the injured. Some were

hospitalized in the plant medical center, others in Midland hospitals.

Next day a Dow man called on each family having a fatality to see if anything was needed in a hurry—emergency money, or transportation somewhere.

Dow then engaged an outside lawyer to help the families straighten out problems caused by the accident—things like auto titles, time payments, debts, and insurance. The injured get workmen's compensation; most of the killed were covered by group insurance.

Dow can't do much about production. Orders will pile up until the wrecked plant is rebuilt and other plants now under way are completed.

Warning Signs in Textiles

Cutters are not buying rayons for spring dresses; cotton-textile sales have slackened. By April we'll know whether the textile boom has collapsed.

The textile industry is riding for a fall. It won't hurt the industry so much as the fall it took back in 1948 and the first part of 1949. Still, there are definite signs that the wheels are about to come off the bandwagon.

For signs of trouble, watch rayons. This is the time when cutters buy rayon fabrics for the spring dress trade. So far, sales have been a flop. It's not too late for a turnaround, but cutters have definitely been buying as though they expected a rotten season.

There's a floor, of course, on the depth to which a textile recession might go. Actually apparel buying is holding up pretty well, and as long as that trend continues it's very unlikely that the bust of a year and a half ago can be repeated.

• **Rayons**—Nevertheless, the hint of trouble in rayons particularly disturbs textile people because rayon has been the shining example of the recovery in textile (BW—Aug. 13 '49, p51). Rayon production in 1949 was under 1948—the first year-to-year decline in the memory of an industry that is growing like a mushroom. But when recovery started, rayons were about the first to feel it; actual shortages in many rayon constructions bobbled up toward the end of the year.

New England rayon men say that mill inventories, which have been geared to a high rate of activity, are quickly going to become excessive if business continues to slump at its present rate. The test on dress goods, they say, will come in April. On the whole the trade expects a good summer retail business, which means that retailers will be ordering from cutters and the needle trades by that time. But if the business does not show up, if it is delayed, or if it is smaller than anticipated, a lot of converters are going to be in inventory trouble.

• **South vs. North**—On this point you get something like a war between the states. Southern rayon mills simply don't agree with the New England people on the state of the rayon business. A statement by a southern mill man last week shows how deep this cleavage runs: "We had a round-table conference at the office this morning about this talk of trouble at the converter level, but we were unable to find any trouble of any significance at any converter with which we are dealing." Another mill reports no stocks of rayon fabrics at the mill, no suspensions of

shipments requested by converters, no cancellations of orders. It says that production is sold out two to four months ahead and that shipments continue to remain steady.

It's well to remember, of course, that in the war for textile markets, the New England textile mills are always more vulnerable. It would not be surprising, therefore, if trouble showed up there first.

• **Cottons**—Cottons are still in good shape—a point on which both northern and southern mills seem to agree. Cotton dress-goods people report that there has been no slow-up in the flow of new business, that they are booked through the second quarter. There are no cotton inventories in the mills, and mill men think that the inventory position at the needle-trades level is not over extended.

But even in cottons there are signs of trouble. Some observers have detected a slackening in sales of cotton textiles and print cloths over the past few weeks. And New England mill people take a cautious view about what will happen later in the year. Will the present activity continue beyond the month of June?

Once again the word is: Watch April.

• **Worsteds**—It's too early so far to tell much about worsteds. Some New England mills are running below the levels of a month or two ago. But this is to be expected. The worsted people are in between seasons, with the spring business over and the fall order-writing just beginning.

There's considerable jockeying going over fall prices. Wool prices are high, so mill prices on fabrics are about where they were for spring fabrics. But the cutters are dickering for lower prices than the spring. So far neither has budged—a characteristic state at this stage of the game. But observers think that the underlying strength of the cloth market is shown by the rising price tags on last fall's carryover of staple fabrics.

• **Second Half?**—The textile industry as a whole is pinning its hopes for a good 1950 on the continued high level of personal income bolstered by the dividend payments on GI life insurance. But even so, there have been plenty of doubts about the second half of the year (BW—Dec. 31 '49, p21).

These doubts stem from the experts' knowledge of the textile industry. Trou-

ble with the industry has always been its great number of middlemen and complicated distribution system. These factors make it possible for inventories to pile up all along the way without any realizing it. And that's precisely what has happened in the past whenever production—as it has over the past year—gets going great guns.

Glenn McCarthy Shuts Down His Chemical Plant

One big reason for Glenn McCarthy's financial troubles came to light this week. It's been something of a mystery why the fabulous Texas oil millionaire found it necessary to turn to RFC last December with a request for a whopping \$70-million loan. Best guess has been (BW—Jan. 28 '50, p82) that he was being pressed on a big insurance-company loan at a time when he was strapped for cash. The insurance company is said to be Metropolitan Life, and the loan it negotiated is supposed to be secured by mortgages on McCarthy's chemical properties.

Last week McCarthy Chemical Co. shut down its main plant at Winnie, Tex. Reason: a plague of operating problems. The plant has been a loser from the beginning, has never operated satisfactorily, and production costs have been climbing steadily. A number of consulting firms have been called in to try and get the plant on the track; right now, Stone & Webster is looking the operation over to see whether the design should be changed.

• **Second Step**—McCarthy Chemical Co. was organized in 1946 as a subsidiary of McCarthy Oil & Gas Corp. of Houston. It was the second step in a McCarthy program to get into production of synthetic liquid fuels and chemicals from natural gas. The first step had been completed a year earlier when another McCarthy subsidiary, Absorption Plant, Inc., got into production with a natural-gasoline absorption plant that extracted propane, butane, gasoline, kerosene, and fuel oil from natural gas. This plant is still operating on its normal schedule.

The McCarthy Chemical plant was to go farther and synthesize a line of petroleum chemicals from natural gas. Plan was to produce such things as ethylene and aromatic products by a synthesis using technically radical processes involving tonnage oxygen of 90% purity. The plant's 200-ton-a-day oxygen unit, based on a Hydrocarbon Research design, will be the largest in the world until the mammoth 2,000-ton-a-day unit, also a Hydrocarbon Research product, goes into operation at the Carthage Hydrocol synthetic fuel plant at Brownsville, Tex.

Club Trouble

Chicago's Union League Club, short of cash to pay off its mortgage bonds, files under voluntary bankruptcy laws.

In the shadow of the Board of Trade Building, and only a step from LaSalle St. (Chicago's Wall St.) stands the staid, 22-story building of the Union League Club of Chicago.

Completed in 1926 at a cost of more than \$4-million, the structure is a monument to one of Chicago's oldest men's clubs. The club traces its origin to the council of the union league, a Civil War organization founded in 1862. Legend has it that William McKinley actually was nominated for the presidency in the Union League Club and not at the convention hall.

• **Hot Water**—Now, for the second time in the memory of many of its 2,000 active members, the club is in hot financial water.

Unable to meet maturing bonds issued to finance construction of its present building, the club was forced to petition for voluntary reorganization under federal bankruptcy laws. Today it is operating under the supervision of

two trustees appointed by Federal Judge Walter J. LaBuy.

• **Depression Trouble**—It all started back in 1924 when the club obtained a \$2.5-million, 5½% first mortgage on its projected new building; Northwestern Mutual Life Insurance Co. was mortgagee. In addition, a \$14-million, 6% second mortgage issue was floated. Members themselves bought a lot of these bonds.

When the depression hit, this load became too much for the club to carry. Interest on the bonds went unpaid. So in 1935 the club was reorganized. By this reorganization, plus other agreements, the fixed debt load was adjusted this way:

• **Northwestern Mutual** forgave much of the unpaid interest, reduced interest charges from 5½% to 3%, extended maturity date to Nov. 7, 1949.

• **Holders of second mortgage bonds** agreed that their bonds would not start bearing interest until Nov. 7, 1944. This interest was not payable until the first mortgage bonds were reduced in principal to \$1-million, but principal and accrued interest both were to become due Feb. 1, 1950.

• **Second Plan**—Months ago it became apparent that the club could not meet these obligations: \$1,037,500 still outstanding in first mortgage bonds, plus approximately \$1,625,000 principal and

accrued interest on the second mortgage. A special committee on refinancing was set up, and a refinancing arrangement was worked out with Northwestern Mutual. Its provisions:

• **A new \$14-million first mortgage**, bearing 4½% interest, was to be granted by Northwestern; this was to be payable over 18½ years. Extra funds obtained were to go into the club's working capital.

• **Second mortgage bondholders** were offered \$14-million in 3%, 25-year second mortgage bonds, plus a cash settlement equal to one-third of accrued interest due.

• **No Sentiment**—But second mortgage holders wouldn't accept the plan. Many second mortgage bonds had been sold to nonmembers since they were first issued, and few of these outsiders were willing to sacrifice anything for the sake of the club.

Unable to swing reorganization on a voluntary basis, the club had no choice—it had to seek reorganization under federal bankruptcy laws.

But in the meantime, club members continue paying their dues, eating their meals in its various walnut-paneled dining rooms, swimming in its 100,000-gallon swimming pool, whose water is triple filtered and purified by ultraviolet rays, using its 267 sleeping rooms for themselves and guests—and hoping for the best.



Something to Read in Moscow

Russia has been easing up recently in its criticism of India's Nehru government. But it looks as if Moscow will have a job of re-education to do on India's new ambassador to the U.S.S.R., Sir Sarvepalli Radhakrishnan. When Sir Sarvepalli stopped off at Paris en route to his new post in Moscow,

a photographer caught him (left) clutching a copy of *The God That Failed*, the self-confessions of six thoroughly disenchanted ex-Communists. Standing with Sir Sarvepalli are Mrs. Dingra, Indian UNESCO delegate, and Sardar Singh Malik, India's ambassador to France.

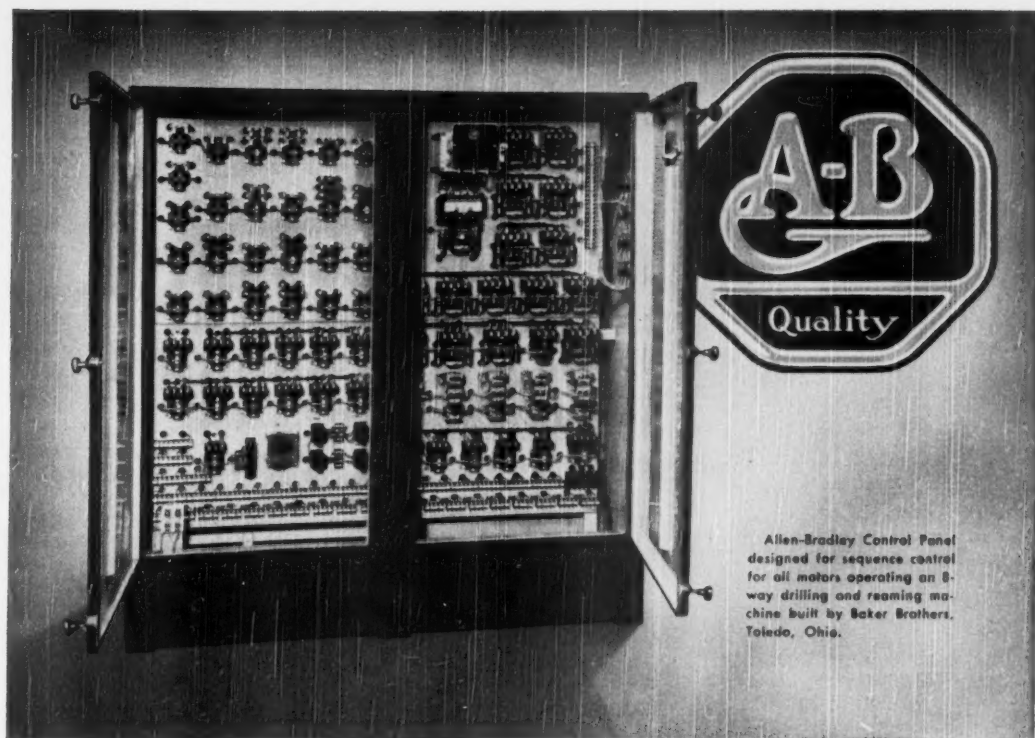
Public Power Moves In On S. Dakota—Sort Of

Public power won a foothold in South Dakota last week. But private power came off better than expected.

The state legislature passed a bill permitting the organization of public-power districts. But it hedged them with a set of restrictions designed to keep them from cutting into the business of the private companies.

Public power wouldn't have stood a chance in South Dakota if it hadn't been for the federal government's development program in the Missouri basin (BW—Dec. 10 '49, p. 24). Four big main stream dams are now going up in South Dakota on the Missouri. They will start generating power in 1953 and 1954. Under federal law, public power distributors get preference in buying this power. South Dakotans feared that neighboring Nebraska—which is 100% public power—would take the entire power output of the new dams away from them.

South Dakota's new law requires a majority vote—rather than a mere petition to set up a public power district. The new districts will not be allowed to sell power farther than 12 miles outside their boundaries.



Allen-Bradley Control Panel designed for sequence control for all motors operating on 8-way drilling and reaming machine built by Baker Brothers, Toledo, Ohio.

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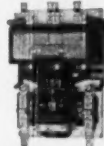
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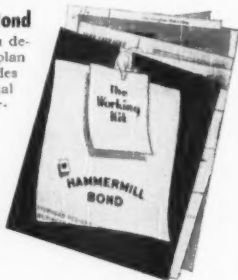
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SW-2-25

LOOK FOR THE WATERMARK . . . IT IS HAMMERMILL'S WORD OF HONOR TO THE PUBLIC

BUSINESS BRIEFS

Alcoa finally decided to go ahead with its long-debated magnesium-sheet rolling mill at New Kensington, Pa. The prospect of a jump in government magnesium orders was the clincher.

Bogus bills cost the public three times as much last year as in 1948. The boom in counterfeiting (BW—Aug. 13'49, p21) brought phony money losses up to \$651,445.

The Brothers Shubert, Lee and Jacob, are charged in a Justice Dept. civil suit with monopolizing the legitimate theater business.

Gross national product was \$257-billion last year, off \$5-billion from 1948.

Pittsburgh's redevelopment (BW—Mar. 12'49, p66) gets under way in June. Equitable Life and the Urban Redevelopment Authority inked contracts last week for construction of the planned 23-acre office-park area.

Tucker's plant, the sprawling Dodge-Chrysler aircraft-engine factory, is now officially on the block. General Services Administration asked for purchase bids this week, will advertise for public sale early next month.

Aircraft orders for more than 700 planes—mostly jet fighters—have been placed by the Navy. Grumman, with a contract for 314, got the biggest slice.

A \$100,000 prize is Georgia's offer for the first company or person to bring in a 250-bbl.-a-day oil well.

Atomic Energy Commission is dicker-ing with Fluor Corp., Ltd., Los Angeles, for construction of the materials-testing reactor at Arco, Idaho.

New plants: Caterpillar Tractor will consolidate more than half its fabrication at a factory at Joliet, Ill. International Harvester will build a \$6.5-million plant at Fort Wayne to house engineering work for its truck division. Fairbanks, Morse goes into the Kansas City area with a \$6-million unit.

Du Pont antitrust suit (cellophane monopoly) went into court. Justice Dept. brought along 2,591 exhibits.

New-vehicle registrations hit a record 5,800,303 in 1949. More than 4.8-million were cars.

CONTROLLER

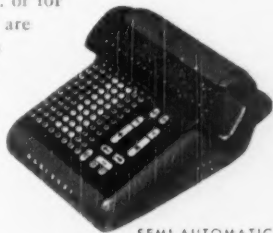


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AUTOMATIC

GOING PLACES

... since he put in Marchant Calculators

Easy and simple to operate, the new *Figuremaster* will cut your figure-work supervision to a minimum. You'll have more time for those important jobs that top-management appreciates . . . and rewards. The Fully Automatic model, the *only* calculator with simultaneous automatic multiplication, is ideal for heavy-volume work . . . or for lighter work the low-cost Semi-Automatic *Figuremaster* is popular. Both are available in 10 or 8 bank capacities . . . choose whichever fits your requirements and business budget. If your need is temporary, rent a *Figuremaster* . . . it will do your calculating easier and at less cost. The Marchant Man in your phone book is ready to *prove this by a demonstration* on your own work. Phone him today or mail the coupon to Marchant Calculating Machine Company, Oakland 8, California.



SEMI-AUTOMATIC

FIGURE FASTER WITH A
MARCHANT
Figuremaster
AMERICA'S FIRST CALCULATOR

MARCHANT CALCULATING MACHINE COMPANY
Oakland 8, California

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Please send me free information about
the new *Figuremasters*:

Fully Automatic ☐ Semi-Automatic ☐ Rental ☐

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Built like a MACK



-Outlasts them all!

It's Profitable to Modernize with Mack...

Your Mack lasts longer, so it costs you less per year. You also save on maintenance and on the costly "absenteeism" of trucks laid up in the shop.

An investment in Mack fire apparatus, Mack diesel or gasoline-powered trucks and buses is an investment in greater earning power. See your Mack branch or distributor at once, because your dollars today will buy more in a Mack than ever before.

Mack Trucks, Inc., Empire State Bldg., New York 1, N. Y. Factories at Allentown, Pa.; Plainfield, N. J.; New Brunswick, N. J.; Long Island City, N. Y. Factory branches and distributors in all principal cities for service and parts. In Canada: Mack Trucks of Canada, Ltd.

TAXES

How 10 senior members of the House Ways & Means Committee will vote on Administration tax proposals:

Question	Yes	No
Will you vote to cut excises by:		
More than the President's \$655-million?	10	—
As much as \$2-billion?	5	5
Will you vote for cutting depletion allowances?	2	8
Will you vote to raise rates on gifts and estates?	6	4
Will you vote to raise the top corporate tax rate:		
By 4 percentage points?	2	8
By 2 percentage points?	5	5
Are you in favor of eliminating the notch rate on corporate income between \$25,000 and \$50,000?	6	4

Half a Loaf for Truman

That's the most he'll get from Congress on his tax plan, poll of House committee shows. Even slight hike in top corporate rates is in doubt; new depreciation allowances don't stand chance.

The table above is the best indication yet of what Congress will do about taxes this year.

It sums up the views of 10 senior members of the House Ways & Means Committee—probably the 10 men most influential in shaping tax legislation.

Of course, you can't be absolutely certain that in April the full 25-man committee—and, later, the House and Senate—will cast their votes in precisely the same way. But there is good reason to believe they will.

• **Cross Section**—For one thing, the 10 congressmen represent the major political groups. Four are Republicans, two are southern Democrats, and the rest are Democrats from the Northeast and Midwest.

For another thing, the lawmakers represent varied economic blocs. All in all, they constitute a pretty good cross section of congressional opinion.

Here, in more detail, is how the committee members will vote:

• **On excises.** The only real question is how much the committee can let revenues fall. The 10 members are agreed on \$14-billion for sure; they say that cuts of this size would stimulate business, produce more corporate and personal income taxes. But half the members will balk at further cuts if they aren't shown where the offsetting revenue will come from.

• **On depletion.** Committee members are impressed by arguments that cutting down on allowances will work hardship on the oil industry. Anyway, the oil-country representatives on the committee and in the House and Senate are strong enough to block action.

• **On gifts and estates.** The committee members split along party lines, Republicans against changes, and Democrats for them. Two of the Democrats who will vote for boosting these taxes will do so only because they think some revenue must be raised to offset excise cuts; they are likely to grant the President only half the \$400-million increase for which he asked.

• **On corporate rates.** All the Democrats, except the Fair Dealers, are against raising the top corporate tax by 4 percentage points. But to get some of the revenue needed to make up for excise losses, they will go along for half. Even such a slight increase, though, has only a 50-50 chance.

• **On the notch.** Most members agree that elimination of the 53% notch rate on corporate income between \$25,000 and \$50,000 is a desirous reform. But they don't think business stands to gain very much by a change now. So they will vote to end the notch only if corporate rates are increased.

• **Mills Plan**—The committee is going to take up one other proposal, not on the Administration's list. It's the Mills plan to collect corporate taxes during the first six months of a year—instead of during the whole year, as at present (BW—Feb. 18 '50, p. 61). If adopted, the plan would raise 1951 revenue by \$5-billion now scheduled for collection in fiscal 1952.

Only a few committee members are sufficiently familiar with the scheme to have made up their minds on how they will vote. But, of those who have, most are for the plan.

Important Facts about

Printing Costs

- The term "printing" is a broad one . . . but it can be divided, roughly, into two classifications.
- Multi-color brochures, beautiful catalogs . . . all such things require the services of a printer equipped with high priced, high speed presses manned by experts.
- But . . . there are dozens of items that do not call for this high priced printing . . . such things as price lists, bulletins, office forms, stationery, envelopes, instruction sheets, leaflets, envelope enclosures, shipping tags, dealer imprinting, etc.
- This is important printing and calls for sharp, distinct impressions, clear-cut line and half-tone reproduction, close color register. Yet, as a rule, the end use does not justify a large expenditure for its production.
- You can realize substantial savings on this class of printing with a Davidson Dual. It meets every requirement for quality, speed and efficiency. And there are two ways in which you can take advantage of its economies.
- Since a highly skilled pressman is not required, you can install a Davidson Dual in your own office with one of your employees trained in its operation.
- Or . . . if your printer owns a Davidson Dual he can produce these items at lower cost to you and still make his normal profit.
- These are proven facts. The Davidson Dual has demonstrated its efficiency and economy in hundreds of businesses all over the country. At the same time, it has proven itself a profitable business builder in hundreds of printing plants, large and small.
- So . . . if you are interested in substantial savings, you and/or your printer should get the facts about the Davidson Dual.
- Write us today. There's no obligation.

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CORPORATION

1034-60 W. Adams St., Chicago 7, Illinois

a generation of experience in the manufacture of
graphic arts and office equipment

Produced and

SOLD

in the South's No. 1 Market

The leading industrial State of the South produces and sells RIGHT AT HOME . . . textiles . . . tobacco . . . furniture . . . food . . . chemical and mineral products.

North Carolina is the hub of the rapidly developing Southeastern market. Whether you sell to industry or consumer, this State offers you a booming local market in which to establish or expand your business!

Population.....3,761,000*
Retail Sales.....\$2,294,535,000*
Net Income.....\$3,487,827,000*
Mfg. Sales.....\$4,497,300,000**
Production Value
of Agriculture.....\$944,900,000**

* Sales Management, 1949 Survey of Buying Power.

** Manufacturers Record.

Get the facts on the State that offers you "Relative Isolation With Maximum Accessibility To Major Markets." On your business letterhead address: Division of Commerce and Industry, Dept. of Conservation and Development, Raleigh,



Death of a Partner

It needn't be fatal to the business, too, under a Tax Court ruling. Insurance can make the pay-off without double taxation.

The U. S. Tax Court has just handed down a decision that will make life—and death—easier for business partners. The court showed a way to provide cash for a deceased partner's estate without selling off any of the assets of the business itself.

The court, in effect, has given its official blessing to a simple insurance scheme that can be used by practically all partnerships. By using the plan, businessmen can overcome one of the biggest drawbacks to the partnership form—the fact that a partnership usually has to be dismembered at the death of a partner.

• **Insurance Scheme**—Here's the way the plan is set up:

The business takes out and pays for insurance on the life of each partner. Beneficiary is the surviving member (or members). By agreement, the survivors promise to turn over proceeds of the policy to the estate in exchange for the estate's interest in the business. That leaves the estate with cash and the business intact.

Of course, the scheme itself isn't new. But, to date, its use has been limited. In almost every case, the Bureau of Internal Revenue has sought, for tax purposes, to include in the deceased partner's estate both the insurance and the share of the business.

Now the Tax Court, in this latest of a series of similar rulings, has told the bureau to stop.

• **Oregon Firm**—The case involved a grain-handling and farm implement business formed in Oregon in 1941. One of the two partners was killed in an accident in 1944. At that time the business had assets worth \$87,000. For each member, there were two insurance policies in force—one for \$10,000, the other for \$15,000 with a double indemnity clause.

The surviving partner collected \$40,000. In accordance with the terms of the partnership agreement, he paid this sum into the estate and received, in return, sole title to the business.

In her tax return, the executrix included the \$40,000 in the estate. But she included nothing for the deceased's interest in the partnership's assets. BIR rejected the return, claiming tax due on another \$40,000 (the agreed-upon price for one-half the assets).

The executrix protested, took the case to the Tax Court—and won. To tax both the insurance and the assets,

the court ruled, was unjustifiable double taxation.

In the language of the decision: "The decedent could not be taxed with an asset, as his own, at death, and, at the same time, taxed with the consideration he relinquished for that asset."

TAX BRIEFS

• **Component parts of costume jewelry**—when sold separately—are subject to the same retail excise tax as the assembled item. The Bureau of Internal Revenue has warned it intends to collect 20% of the selling price of safety catches, bracelet links, unset rings.

• **Fur retailers** are free to advertise that they will refund excise taxes if and when Congress cuts rates. BIR has ruled that there's nothing in the tax code to prevent it.

• **An employers' tax handbook** showing who has to withhold what from whom—and when—will be available from the Treasury in a few weeks.

• **A combined table** that tells at a single glance how much you withhold in income and social-security taxes for each employee is being worked out by BIR mathematicians.

• **Consolidated returns** for 1949 must be filed by affiliated companies which did so in 1948.

• **Rules governing rewards** for tax information have just been revised by BIR. The bureau no longer limits payments to 10% of the amount recovered.

• **Your contributions** to volunteer firemen's organizations may be legally deductible. The U. S. Tax Court has ruled that such gifts are charitable where the funds are held in a public trust.

• **Rent on stock** borrowed to cover short sales is a deductible expense for an investor. Up to now, BIR has granted such deductions only to active traders or speculators.

• **Living expenses** on a job away from home are not deductible from taxable income, unless the distant job is only temporary. The U. S. Tax Court has just ruled that where employment is indefinite or permanent, the taxpayer can't consider food and lodging a travel expense.



New

**ADVANCED H-5
GYRO-HORIZON**

READY FOR TAKE-OFF IN 30 SECONDS

The new Sperry H-5 Gyro-Horizon features the fastest gyro erection device yet developed to help transports reduce ground time and gain flying time. The initial erection cycle is completed in 30 seconds after the main switch is turned on... permitting immediate take-off. This *advanced* artificial horizon promotes airline schedule reliability by thus expediting take-offs, saving valuable time on routine stops and turnarounds.

The erection device which makes this possible operates in conjunction with a small remote power control unit. Other design changes feature latest developments for increased reliability and longer service life. Improved dial with larger miniature airplane increases angle of

vision 40°... giving the pilot clearer visibility, easier and more accurate readings of bank and pitch.

When the Gyro-Horizon is paired with the Sperry Gyrosyn Compass, the pilot gets *attitude* and *directional* indications he can rely on. Result... precise attitude and directional control regardless of visibility.

OTHER FEATURES OF THE H-5. Non-tumbling... no caging devices needed. Freedom of roll through 360 degrees. Gyro won't tumble even during a complete loop.

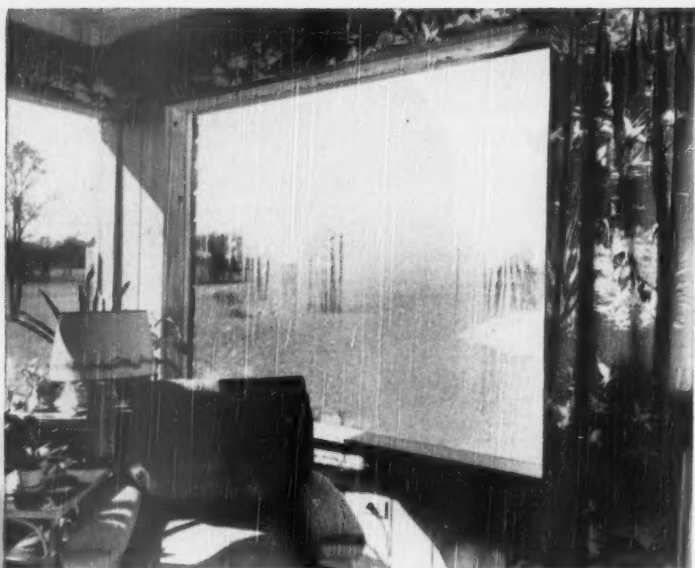
This new Gyro-Horizon is another example of Sperry's *advanced* research and engineering *timed* to today's *advanced* aviation service. Our Aeronautical Department will be glad to supply complete information.

SPERRY

GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION, GREAT NECK, NEW YORK

CLEVELAND • NEW ORLEANS • LOS ANGELES • SAN FRANCISCO • SEATTLE • NEW YORK • IN CANADA: THE ONTARIO HUGHES OWENS COMPANY, LIMITED • OTTAWA



This is WETth at work. Look for it in your plant

WETth—moisture you usually *can't* see or feel—is exposed by a cold windowpane. It condenses and fogs the view, runs down the glass and soaks the sill. A nuisance!

In your office, plant or warehouse, however, unseen WETth can cause serious trouble. Drying operations slow to a standstill, chemical processes get off the beam, metals corrode and finishes discolor. Raw materials and finished products spoil in storage. Tabulating cards swell, jamming bookkeeping machines.

Lectrodryer's two books—"The World Is Sopping Wet" for the technical man, and "Because Moisture Isn't Pink" for the nontechnical—tell you how to deal with WETth. For copies, mail this coupon.

Next month we'll tell you how a leading laboratory uses DRYing in their research

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AUTOS

Cars at Chicago

Despite weather, attendance and buying were good. K-F, Nash big drawing cards with new models.

For sheer flash and size, Chicago's auto show was hard to beat. Manufacturers packed close to \$5-million worth of cars, trucks, and accessories into the Windy City's International Amphitheater. In and around the displays, they staged a brand of hoopla that ran all the way from television shows to beauty parades and pageants.

• **Attendance**—From the start, attendance was good. For the first night "pre-view," show committeemen sent out 10,000 invitations, figured on about 8,000 showing up. When the count was in, close to 15,000 had shoved their way through the doors.

Even a snowstorm the next day failed to keep the crowd under 35,000 (at 90¢ an adult). The following day, attendance hit 53,000—a record, Chicago people said, for any auto show anywhere. By week's end, it seemed almost sure final attendance would match the 500,000 goal set by the committee.

• **Standouts**—Among the individual exhibitors, Kaiser-Frazer had a decided edge. KF's three new lines of 1951 models had their first public showing (BW—Feb. 18 '50, p. 46). The baby Kaiser was still minus a price tag, but more and more hints seemed to put the tariff at about \$1,200.

Nash's "n.x.t." (BW—Jan. 7 '50, p. 25) was another big drawing card. The proposed \$1,000 car carried a question: Do you want to buy it? As visitors filed past the exhibit, they got a questionnaire to fill out and mail to the company for tabulation.

Besides K-F and Nash, 16 other passenger cars were on display: Buick, Cadillac, Chevrolet, Chrysler, DeSoto, Dodge, Ford, Hudson, Lincoln, Mercury, Oldsmobile, Packard, Plymouth, Pontiac, Studebaker, and Willys.

Mercury got an unexpected sales push at precisely the right moment. Late in the first day, unofficial reports came through that Mercury had won the Mobilgas Grand Canyon run with an average of 26.5 mi. a gal. over the tough 751-mi. course.

• **Orders**—Order taking, though not sensational, was brisk enough to satisfy most dealers. By midafternoon of the second day, a quick sample showed that every exhibitor had sold from three to five cars.

MODERATE MIDDLE SOUTH

Climate

Favors Industrial Operation

The mild climate of THE MIDDLE SOUTH appeals to both industry and labor. To industry it means lower plant costs. To workers it means pleasant working conditions, more opportunity for healthy recreation.

In addition to climate, THE MIDDLE SOUTH offers a dependable labor supply, abundant natural gas and oil, a wealth of agricultural and forest raw resources, adequate transportation over interconnected rail and water systems, electric power, a strategic position on the trade routes joining mid-continental United States with world markets, and a public attitude that welcomes new industry. This combination of desirable factors identifies THE MIDDLE SOUTH—Arkansas, Louisiana, and Mississippi—as a region of economic unity.

Industry's confidence in the future of THE MIDDLE SOUTH is based on the region's combination of advantages. *That confidence is reflected in the investments industry is making in THE MIDDLE SOUTH.* Three such investments are represented by the plants on your right.

For further information write

THE MIDDLE SOUTH

Area Office, 211 INTERNATIONAL TRADE MART, New Orleans, Louisiana or any of these business managed, tax paying electric and gas service companies:

ARKANSAS POWER & LIGHT COMPANY
Pine Bluff, Ark.

MISSISSIPPI POWER & LIGHT COMPANY
Jackson 113, Mississippi

LOUISIANA POWER & LIGHT COMPANY
New Orleans 14, La.

NEW ORLEANS PUBLIC SERVICE INC.
New Orleans 9, La.



IN ARKANSAS—MUNSINGWEAR, INC., makes ladies' fine nylon hosiery in this plant at Rogers. A good labor supply and favorable working conditions were among the reasons this plant was located in THE MIDDLE SOUTH.

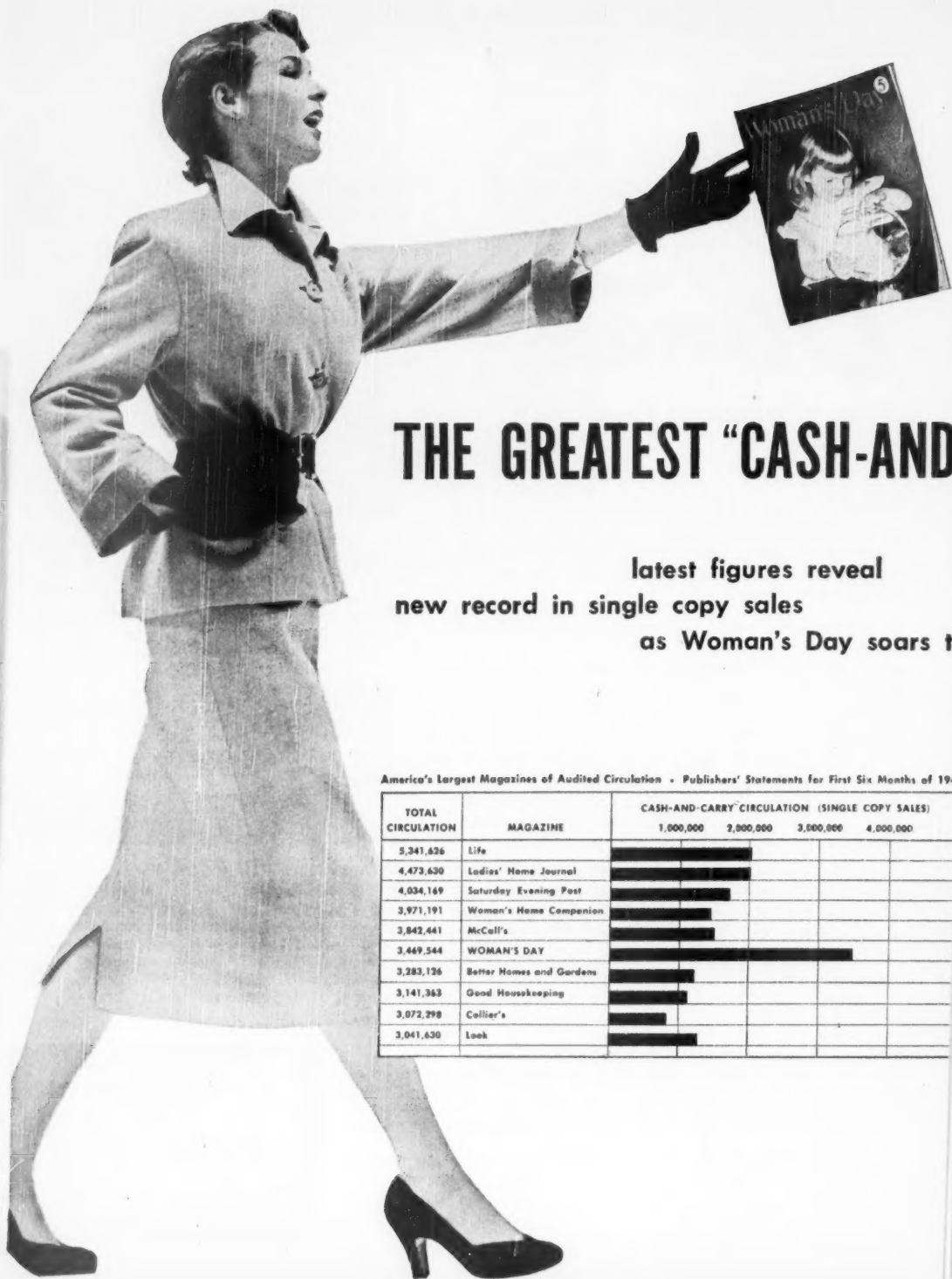


IN LOUISIANA—COMMERCIAL SOLVENTS CORPORATION, Sterlington, doubled its production facilities in 1948. The plant makes ammonia used in fertilizer and methanol used in anti-freeze. Good working conditions for a high type of labor, abundance of natural gas, and proximity to a large fertilizer market were factors influencing the expansion.



IN MISSISSIPPI—HASPEL'S INCORPORATED, Tylertown. This plant, a branch of one in New Orleans, was completed in 1947. It makes men's refreshable summer suits for national distribution. The Tylertown location was chosen because of availability of dependable labor, a cooperative community attitude and facilities for marketing.





THE GREATEST "CASH-AND.

latest figures reveal
new record in single copy sales
as Woman's Day soars to

America's Largest Magazines of Audited Circulation • Publishers' Statements for First Six Months of 194

TOTAL CIRCULATION	MAGAZINE	CASH-AND-CARRY CIRCULATION (SINGLE COPY SALES)			
		1,000,000	2,000,000	3,000,000	4,000,000
5,341,626	Life				
4,473,630	Ladies' Home Journal				
4,034,169	Saturday Evening Post				
3,971,191	Woman's Home Companion				
3,842,441	McCall's				
3,449,544	WOMAN'S DAY				
3,283,126	Better Homes and Gardens				
3,141,363	Good Housekeeping				
3,072,298	Collier's				
3,041,630	Look				



CARRY CIRCULATION" OF ALL MAGAZINES

new heights

Single copy sales are the cream of magazine circulation because they are buyer-initiated. No premiums or pressures, no "song-and-dance," no special inducements bring these sales in. The single copy sale reflects the reader's desire to buy, rather than the publisher's desire to sell.

WHAT DO WE MEAN BY "CASH"? Cash is ready money . . . money the shopper is ready and able to spend to satisfy her immediate needs. Cash is what makes a woman say in one breath, "I want it" and in the next, "I've got it."

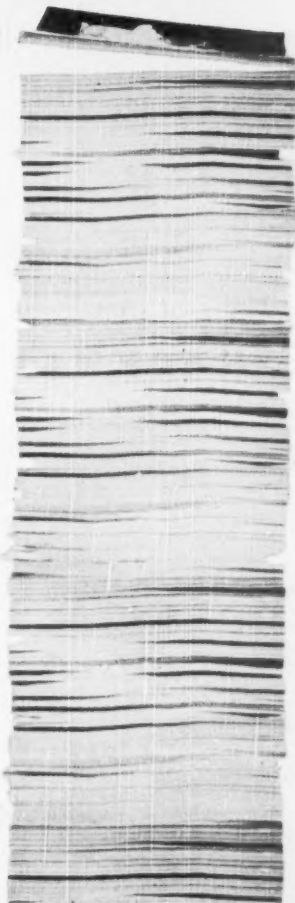
WHAT DO WE MEAN BY "CARRY"? Carry means on the go, out in the market. It is circulation that's decidedly not dead, sick, moved, disinterested, or too busy to read. Single copy customers are not only up and around. They're eager to buy . . . and that goes for products too.

"CASH-AND-CARRY" . . . YOUR MOST VALUABLE CIRCULATION. Cash-and-carry magazine sales represent "live" money from "live" customers . . . the richest potential for your product. The entire circulation of Woman's Day is made up of these sales . . . and Woman's Day tops all the other leading magazines in "cash-and-carry circulation."

With the December 1949 issue, Woman's Day hit a new high of over 3,830,000 — the largest single copy sale of any audited magazine in the world. And the picture for 1950 is healthy. First quarter figures show an 8.4% increase in lineage and a 13.6% increase in revenue . . . the greatest number of editorial pages, the greatest number of advertising pages ever bought in Woman's Day history.

Woman's Day

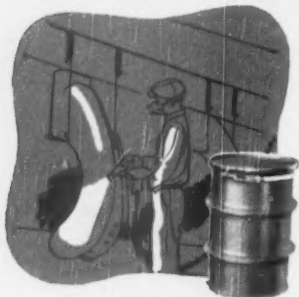
on sale at all A & P food stores—5¢





WATER SUPPLIES ARE PURIFIED

By chlorine. This important chemical keeps our modern water systems safe from contamination. And this gas is transported and stored safely in Hackney Chlorine Cylinders.



BRILLIANT, LASTING COLOR FOR STREAMLINED BEAUTIES

... Modern paints give today's automobiles added eye-appeal and sales-appeal. And these paints are kept clean and uncontaminated by Hackney Removable Head Drums in storage and transit.



AMERICA'S HOUSING ON FIRM FOUNDATION

Efficient, cost-saving construction equipment is used to pour basements, foundations, driveways, etc. This lightweight, durable Hackney Water Tank is used on concrete mixers and pavers.

HACKNEY PRODUCTS

**provide better,
more efficient
service**

**—in vastly diversified
markets**

Here are just a few of the many industries which depend on Hackney Products. A manufacturer in one industry may need cylinders, another may order drums, still another call for a special shape or shell. But all users in these vastly diversified industries have learned the competitive advantages of Hackney Deep Drawing—light weight, greater strength, longer life, improved appearance, etc.—and insist on them for their products.

Whether you require cylinders, drums, barrels, kegs or special shapes and shells, you can benefit from Pressed Steel Tank Company's experience and manufacturing facilities—almost 50 years of specialized knowledge of metals and of the properties of gases, liquids and solids. Write for full details.



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936 W. Peachtree St., N.W., Room 115, Atlanta 3, Ga. • 208 So. LaSalle St., Room 2072, Chicago 4, Ill.
555 Roosevelt Building, Los Angeles 14, Calif.

CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

COMMODITIES



Natural Rubber Recoups Last Summer's Price Loss

Natural rubber prices have made a good comeback since their postdevaluation low. Last October, just after devaluation, rubber was selling at 16.3¢ a lb. Now it's back to 19.3¢, topping last January's 19.2¢, the high for 1949. For most grades, natural is topping synthetic too, which is pegged by the government at 18.5¢.

Partly, the reason is just better business. This has increased demand for rubber. When natural was low, rubber users bought it—enough to push on the price.

A big factor in the increase is the uncertainty in Indonesia. There have been strong indications that the nationalist guilders may be devalued. So producers may be holding back from the market because they don't want to sell rubber now that might bring them more guilders after devaluation. The unrest has also slowed deliveries; until recently, you could hardly get spot rubber in New York.

Buyers aren't too bothered. If the price gets too high, tire makers, who use about 75% of the natural rubber imported, will use more synthetic in their product.

this welding rod makes scrap heaps obsolete



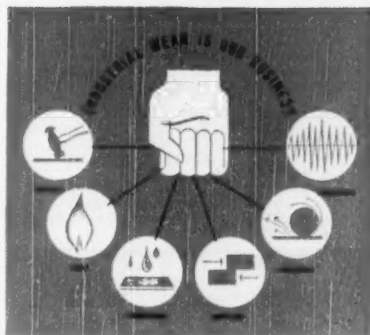
A FORTUNE— RECLAIMED BY HARDFACING

600% increase in the life of hammers pulverizing asphalt roofing trimmings—bulldozer blades last 15 times longer—the cost of stamping dies for aluminum cut in half . . . all the result of hardfacing parts that would otherwise quickly lose the battle to abrasion and impact.

Hardfacing is the laying of a hard wear-resistant metal surface on a softer base metal by gas or arc welding. It can be done in the field, in the plant, on the job quickly and efficiently.

In lumber, paper or cement mills, in mining, dredging and excavating, on railroads—in heavy equipment everywhere—hardfacing with Amsco welding products has increased useful service life with directly traceable savings in lower maintenance and replacement costs, fewer shutdowns, and smoother production.

Let Brake Shoe's engineers show you where hardfacing may offer real economies in your business. Write for booklet, "Hard Surfacing by Fusion Welding."



AMERICAN

Brake Shoe

COMPANY

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10 Divisions of American Brake Shoe Co. produce wear-resisting parts in 58 American and Canadian plants.

AMERICAN BRAKEBLOK DIVISION • AMERICAN FORGE DIVISION • AMERICAN MANGANESE STEEL DIVISION
BRAKE SHOE AND CASTINGS DIVISION • ELECTRO-ALLOYS DIVISION • ENGINEERED CASTINGS DIVISION
KELLOGG DIVISION • NATIONAL BEARING DIVISION • RAMAPO AJAX DIVISION • SOUTHERN WHEEL DIVISION

SELLING SOMETHING ELECTRICAL?



MODERNIZING FOLLOWS ELECTRICITY INTO 9 OUT OF 10 MIDWEST FARM HOMES!

Of the 1,177,865 subscribers to the five farm papers of the Midwest Unit, 89% now have electricity in their homes. Much of this electrification is new. Add to new opportunities the normal replacement and "re-modernization" market: the field for sales of appliances and equipment is wide open!

PLUG IN FOR SALES in the World's Richest Farm Market!

A forward-looking survey in 1949 revealed important facts about the potential market for home conveniences. Now, the money-in-the-bank readers of Midwest Unit Farm Papers are buying! Sell 'em—at their local level, in their own local farm papers.



GET YOUR COPY OF THIS 28-PAGE MARKET STUDY

Here's a comprehensive study of the market for MAJOR HOME CONVENIENCES ON MIDWEST FARMS. Write for a free copy today.

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• 59 E. Madison Street, Chicago • 543 New
Center Building, Detroit • Russ Building, San
Francisco • 1324 Wilshire Blvd., Los Angeles

MARKETING



ON THEIR ROUNDS, buyers shop for the goods that will make the most profit.

Exit Bonus for Macy Buyers

New York retailer decides on straight salaries after 10-year tryout of bonus system. The big question: Do bonus incentives help the department—hurt the department store?

In any department of any department store, the buyer is the little tin god. He—or she—chooses the merchandise, fights for the advertising, wangles window displays. In short, the modern department store has become a loose federation of semi-autonomous states, each run by an ambitious and frequently vengeful monarch.

The aim of each buyer is always the same: to make the maximum contribution to the over-all profit of the store. It sounds like a selfless ambition, but it isn't so altruistic as it sounds. For in many cases, the buyer gets a bonus; and the size of the bonus depends mainly on the size of the department's contribution to profits.

• **Switchback**—For some 10 years, this has been the system of the nation's largest department store, R. H. Macy & Co., in New York. Last week, however, Macy's gave its bonus-incentive system the death sentence. It went back to the plain, unexciting old system of straight salaries. To make up for the lost remuneration, salaries were revised—mostly upward—at the same time.

Macy's isn't talking about any phase of the new compensation system, but the trade is talking plenty. It couldn't

make up its mind whether Macy's had done the right thing or not.

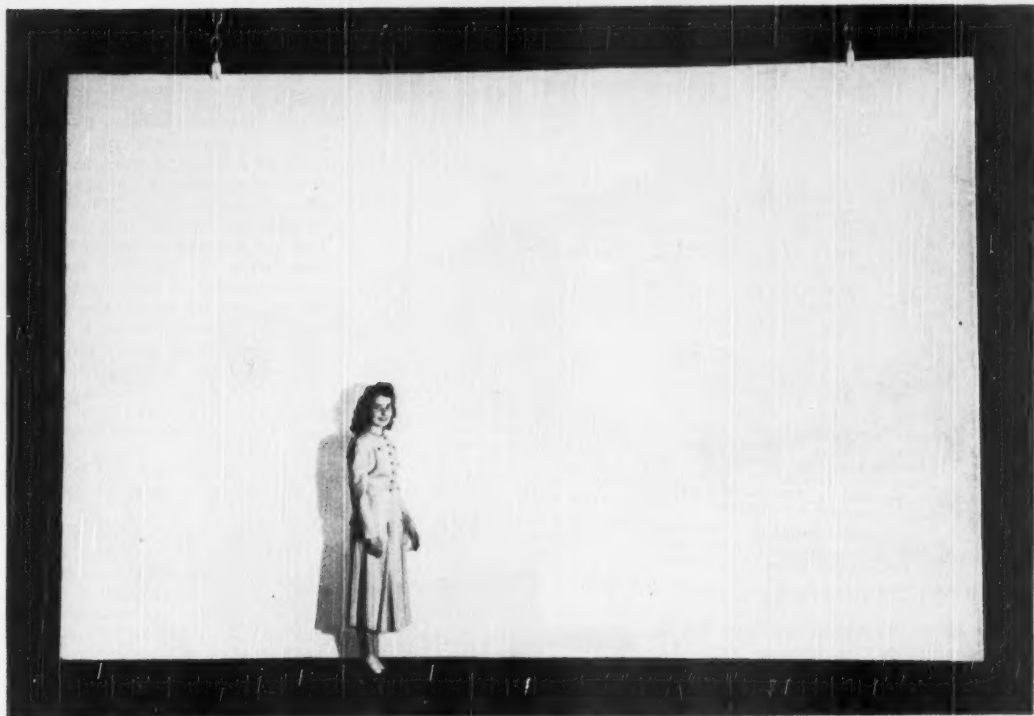
• **The Goal's the Thing**—Here's how Macy's old plan worked: About 1940, the Macy management looked over the records of the preceding five years to figure out just what each department's contribution to profit ought to be. Each department then got a goal, which was labeled "department margin." This consisted of the department's gross margin in dollars less such direct expenses as advertising, delivery charges, and other expenses of variable nature (as opposed to relatively fixed charges such as rent, depreciation of store fixtures, etc.). Then it was up to the buyer to meet—or beat—the goal.

• **Case in Point**—Take a hypothetical case. Suppose a buyer was running a department that had been assigned a \$100,000 goal for department margin. The buyer's base salary was, say, \$10,000.

Then suppose the buyer worked hard enough to bring his actual department margin for the year to \$110,000. Under the old Macy plan, he would earn a bonus of 10% of the excess of the goal—or \$1,000.

Suppose the buyer really put on the steam and beat the department margin

Looking for a Stainless Steel Plate as "big as the side of a house?"



THIS 3/8" PLATE IS 220-1/2" LONG, 133-3/8" WIDE, U·S·S 10-0 CO. (TYPE 304)

Come to Stainless Headquarters when your
plate specifications call for sizes beyond the ordinary

• We show you this huge plate of Stainless Steel, $\frac{3}{8}$ " thick, 220 $\frac{1}{2}$ " long and 133 $\frac{3}{8}$ " wide, not because we consider it unusual but because there are still some plate users who are not fully aware that Stainless Steel plate in these extreme dimensions is readily available.

The fact is we have been producing such extra-large sizes for some time and

can supply even larger if you need them.

So whenever your designs call for large dimension Stainless Steel plates to improve your equipment or to reduce welding costs and simplify fabrication, tell us what you need and give us an opportunity to show you how well we can meet your requirements.

Keep in mind too, that U·S·S Stain-

less Steel plates are produced in the complete range of standard sizes usually required by industry, in thickness from $\frac{3}{16}$ " and greater, and are available in all U·S·S Stainless Steel grades.

In whatever size furnished, U·S·S Stainless Steel plates are distinguished for their superior surface quality. Chemical composition and physical properties are reliable. Our Stainless Steel specialists will be glad to cooperate with you in applying them to your construction to insure optimum results with minimum cost.

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UNITED STATES STEEL

“our only regret...we did not start using your Commercial Financing Plan sooner”

LETTER FROM WESTERN LUMBER MILL

Because of confidential nature of our service, name and address of client has been deleted.

Commercial Credit Corporation
1200 S. W. Morrison Street
Portland 5, Oregon

Gentlemen:

The only regret we have about Commercial Credit is that we did not start to use your Commercial Financing Plan sooner.

Prior to January, 1948 our operations were limited because our working capital was small in relation to volume, and we were able to secure only limited lines of credit from local sources.

Since doing business with you, we can proceed with the assurance that sufficient funds are available to operate at capacity as the conditions justify. We figure you have just about doubled the amount of cash available to us from our previous credit source.

Having this matter of enough operating cash settled has been a great relief. It means that our principals can devote their full time and energy to manufacturing and selling which is the way we like it.

We used over \$1,500,000 of your money during our first year of business relations. That money not only helped us finance larger production and sales, but the flexibility of your service helped us to finance unwieldy log inventories in peak seasons of the year. One more point is that you have made it possible for us to buy certain machinery and equipment to cut production costs.

We like doing business with Commercial Credit. Your executives have a thorough understanding of business problems, and we have found them always ready to be helpful.

Yours very truly,

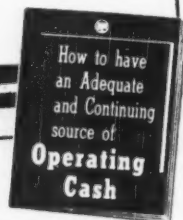
Need MORE CASH for your business?

HERE'S THE QUICK WAY TO GET IT

Our timely book describes how your company can get substantially more operating cash by using our Commercial Financing Plan. Because it is a continuing arrangement, this plan eliminates renewals, calls and periodic cleanup of obligations... Quick, simple and confidential in operation, our Commercial Financing

Plan does not disturb customer relations, change your accounting methods, or interfere with management... For a copy of "HOW TO HAVE AN ADEQUATE AND CONTINUING SOURCE OF OPERATING CASH," just write or phone the nearest Commercial Credit Corporation office listed below. No obligation.

COMMERCIAL FINANCING DIVISIONS: Baltimore 2 • New York 17 • Chicago 6
Los Angeles 14 • San Francisco 6 • Portland 5, Ore. . . and more than 300 other
financing offices in principal cities of the United States and Canada.



by \$60,000. It looks as though his bonus should have been \$6,000—10% of \$60,000. But when the amount of the bonus became greater than 50% of the buyer's \$10,000 salary, a new rule applied. On the first \$50,000 of extra margin, the buyer got his 10%; but on the margin in excess of this \$50,000, he got only 5%. In other words, he got \$10,000 salary, plus \$5,000 bonus on the first \$50,000 excess, plus \$500 on the last \$10,000 excess—for a total of \$15,500.

• **Limits**—There were a couple of other rules, too, that kept down the size of the bonus a buyer could earn. No buyer could get a bonus of more than 100% of his salary. And if the store's overall profit failed, say, by 20%, to reach its goal, all bonuses were cut 20%. That was intended to prevent the store from feting the buyers at the stockholders' expense. In addition, the buyer had to have his inventories in good shape to get the full bonus.

The department margin goal stayed the same, under the old Macy plan, until a new buyer took over the department. Then a new goal was set, based on the department's then-current potentialities.

Various other department stores have similar systems in operation with varying details.

• **A Team?**—Why, then, did Macy's change? Proponents of the straight-salary system have an answer: to get a better team. In a store as big and sprawling as Macy's, intramural competition among buyers for advertising and floor space, window displays, clerks, etc., can get to be an awful headache. There can be politicking, hair-pulling. Presumably, straight salaries will put buyers more into a mood to consider over-all selling problems of the store.

• **Still on His Own**—Other department-store observers hold a different view. They claim that—bonus or no bonus—the buyer has to fight for his department tooth and nail. If you do away with bonuses, the buyer will make his play for a salary increase. So he will try to turn in red-hot sales records. And that means he has to be just as scrappy as ever.

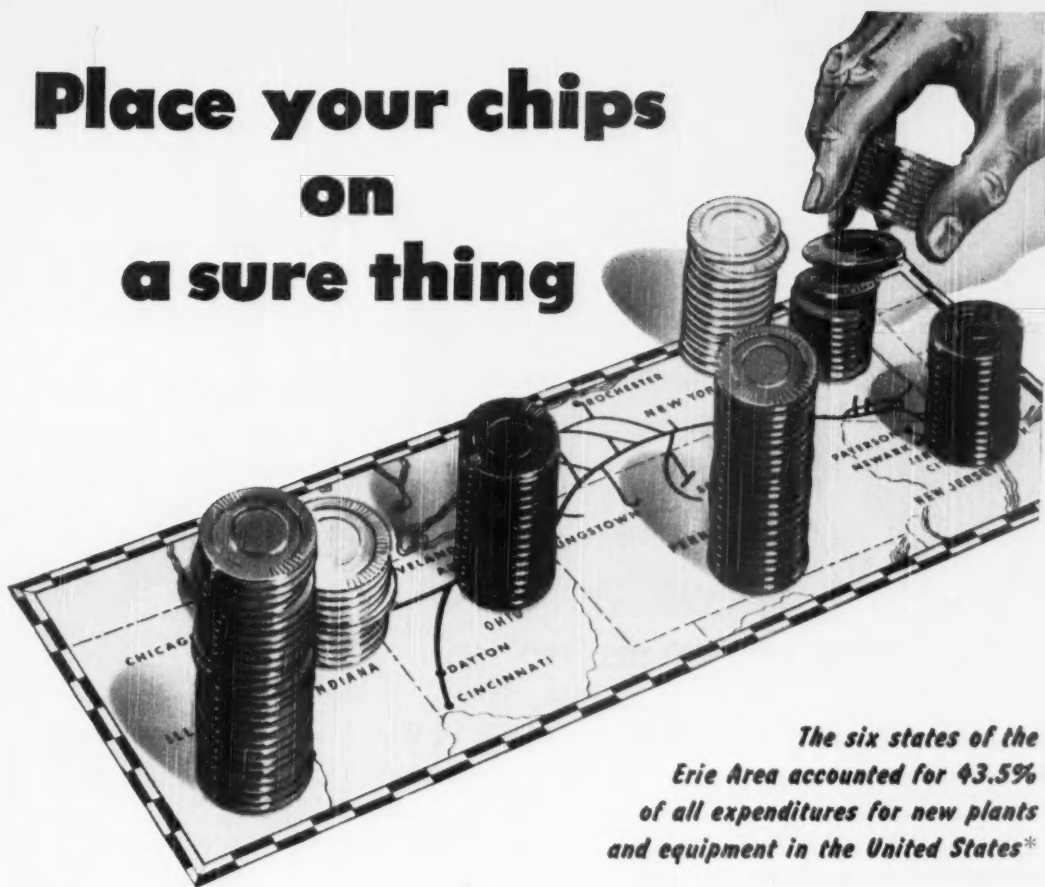
• **Price-Dip Angle**—Be that as it may, Macy's has decided to do away with bonuses. There are probably some other angles to this:

Ever since the bonus plan went into effect, just before the war, retail sales have been climbing upward—until recently. Now it has become touch-and-go whether a store beats last year's figures or not.

So the buyer who takes over a department now is going to have a tough time earning a bonus. Macy's may have figured that this would be a handicap in getting future topnotch personnel.

What's more, with prices declining,

Place your chips on a sure thing



*The six states of the
Erie Area accounted for 43.5%
of all expenditures for new plants
and equipment in the United States**

IF you are looking for the right spot for a plant, you should take a good look at the Erie Area.

These six states have such an overwhelming lead in manufacturing—45% of all the United States—that the other statistics are correspondingly good.

The Erie Area accounts for 34.27% of the population, 40% of the national income and about 1/3 of the retail trade. Skilled labor, as you

would expect, is plentiful, because of the many opportunities in the area.

To top all this, you are served by the dependable Erie Railroad that connects with other railroads north, south and west and with the famous harbor of New York.

Our experienced personnel will be glad to help you find the right spot for your plant in the Erie Area—the area that has the best of everything!

Here's how to get action!

Send an outline of your requirements and preferred location to:
Mr. A. B. Johnson, Vice President,
Room 502, Midland Building,
Cleveland 15, Ohio. All information
will be held in strict confidence.

*Source: Census of Manufacturers, 1947 Report MC100-8



Erie Railroad



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This frustrated character will undoubtedly live to jump again—at the mere mention of the word “Cyclone.” And like others of his breed, he’ll most certainly give Cyclone Fence a wide berth.

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SEND FOR FREE BOOK. You’ll find our big, 32-page fence catalog a valuable reference book. It’s full of pictures, facts, specifications. Shows 14 types of fence. Describes gates and other property safeguards. Before you choose any fence for your property, get the facts about Cyclone.

CYCLONE FENCE DIVISION
(American Steel & Wire Company)
WAUKEGAN, ILLINOIS, - BRANCHES IN PRINCIPAL CITIES
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

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Please mail me, without obligation, a copy of “Your Fence.”

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City.....State.....

Interested in fencing: ☐ Industrial; ☐ School; ☐ Playground;

☐ Residence. Approximately.....feet.



UNITED STATES STEEL

a buyer already with the store might be faced with this dilemma: He might actually be selling more dresses, say, than in 1949; but lower prices would mean that his contribution to over-all profits was growing smaller and smaller. His earnings, therefore, would be decreasing. That raises a question: Is it fair to penalize the buyer for a price drop which is, of course, out of his control?

Macy’s management may have figured that the easiest way to untangle all these snarls was to junk the whole bonus incentive plan and go back to a straight salary system.

Electric Plug: TV

Electric trade group in Chicago televises sales lessons to dealers, hopes to catch the buying housewife, too.

The electric industry is taking a collective flyer in television in Chicago. Last week the Electric Assn., a Chicago trade group composed of utilities, manufacturers, wholesalers, contractors, dealers, and others, started a 13-week series of training programs over WNBO.

• **A Big Class**—Main object of the two 15-min. programs each week will be to educate the electric appliance dealer and his salesmen in their jobs. The Electric Assn. hopes that when the program (titled “Adventures in Electrical Living”) goes on at 4 p.m., the dealer and his men will gather around the TV set and soak up information. Armed with this knowledge, the salesmen will be better able to sell “electrical living” to the public.

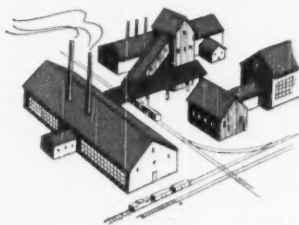
The program is designed primarily to reach some 3,000 electrical dealers in the Chicago area. But it will reach other audiences as well. The association hopes that a good number of the 353,895 housewives with TV sets will turn them on during the afternoon breathing spell before it’s time to get dinner.

• **Manufacturers Benefit**—The entire series is being financed by the Electric Assn. as one of its educational activities. The only financial hand manufacturers have in it is their annual dues and subscriptions as members of the association. As a result, the show will plug no specific manufacturer’s products except some small table appliances. But the manufacturers have a definite stake in the program, says the association. The public will get a better idea about what’s in electrical appliances for them—both through the better-trained salesman and directly through the program itself.

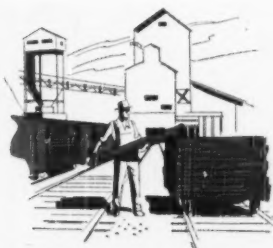
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penta- chlorophenol



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investigate → **penta-
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"The British Industries Fair, as usual, will be a must not only to our London Office representatives but also to those representatives of the home office who will be in England between May 8 and 19," says Joseph P. Kasper, President of Associated Merchandising Corporation. "We have always found visits to the B.I.F. time well spent as it gives our merchandise representatives and buyers a comprehensive picture of all products made by British manufacturers."

BRITISH INDUSTRIES FAIR

Open: London and Birmingham, May 8-19

Big Decade Ahead for Furniture

Commerce Dept. thinks that heavy home building, population gains, and high consumer purchasing power spell good business for the industry. Television is also a factor.

In the last three decades the furniture industry has had its share of hard luck. In the '20's the rapid rise of the auto, coupled with the nationwide urge to get out and go, left little incentive for sprucing up the home. When the depression in the '30's forced people to stay home, they couldn't afford new furniture. Then in the '40's the war clamped a low ceiling on production.

With the arrival of the postwar period, the industry got its long-delayed boom. The nation's household furniture expenditures hit an all-time high of \$2.7-billion in 1948. This compares with \$931-million for 1939, and \$1.1-billion in prewar's big-spending 1929. • **Recovery**—The industry got a jolt, however, in the last quarter of 1948, when sales turned down in a slide that lasted until last fall. But at that point business picked up again (BW—Nov. 5 '49, p.61). The furniture industry once more took hope about the future.

Now the Dept. of Commerce has come along with a survey that lends support to those hopes. Its reassuring conclusion: The industry may well be

entering its most prosperous decade by far.

The survey scans the U. S. economy and cites these major props under the industry's present high level of production:

Residential construction, which set a record of a million new starts in 1949. During 1950 the number of nonfarm dwelling starts is expected to ease to 900,000 units. But with \$6.5-billion expected in residential construction, 1950 should still be a pretty fair year by all previous standards.

The population increase, which has amounted to over 18-million since 1940. This was due chiefly to increased longevity and a bumper crop of war and postwar babies. Its impact already is showing up in an unprecedented demand for juvenile furniture. As these war babies reach school age, the demand will shift to other furniture categories.

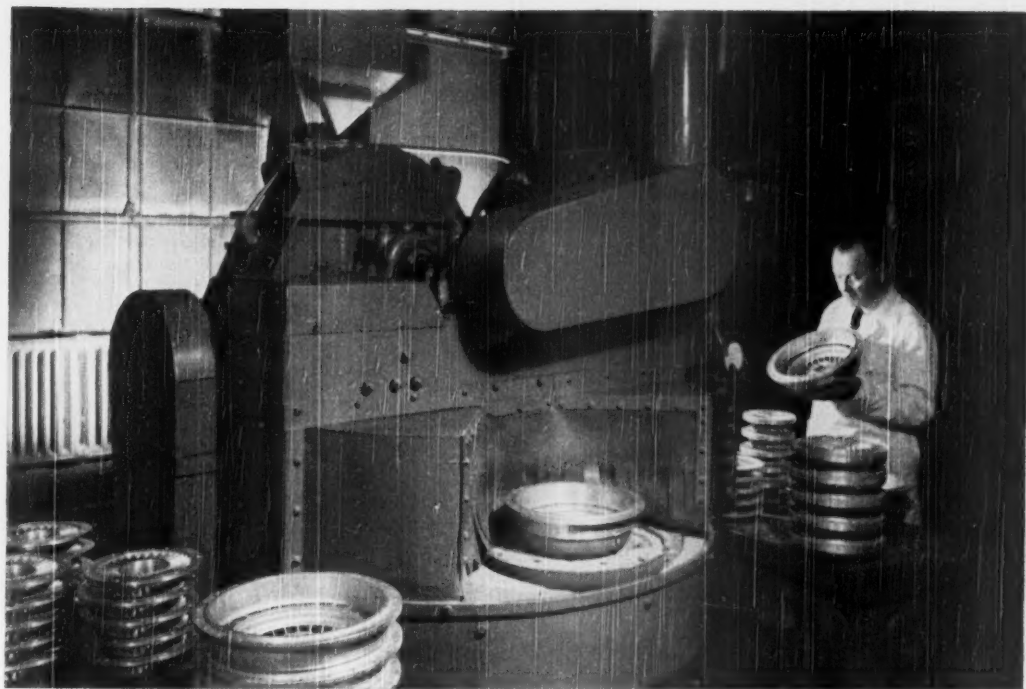
Consumer purchasing power, which is expected to continue at its present high level. This is good news for almost everyone, but particularly so for the furniture industry. For while the na-



Pay-as-You-Drive Purchasing

If you gotta go, you gotta go, but you gotta have a quarter. That's the system that Max R. Tauber, Chicago automobile dealer, is installing in cars he is selling to installment buyers. Tauber puts a coin meter on the dashboard, sets it to fit various in-

stalment plans. A quarter dropped into the meter turns the ignition on for a specified period of time. A series of small payments, says Tauber, makes it easier for car buyers to meet monthly installments than if they have to pay a big sum all at once.



Deburbing Barrel—one of 4,636 precision machines in the present-day Packard plant

The new wonder-working machine that thrives on walnut shells

Packard purchasing agents blinked when the Automatic Transmission Division submitted its first weekly order for 50 pounds of ground walnut shells.

But it seems that ground walnut shells are ideal—not only for blasting the tiny burrs off the machined surfaces of aluminum torque converter castings—but for improving the surface finish. The machine pictured above was custom designed and built to carry out this novel technique.

That's just one example of the ingenuity that has characterized the manufacturing, as well as the engineering, of Packard's amazing new Ultramatic Drive.

In pioneering what impartial technical observers now refer to as "the last word in automatic, no-shift control," Packard had the vision to begin its research and development program 16 years ago.

And Packard had the ready resources to equip its new Automatic Transmission Division with \$7,000,000 in new precision manufacturing facilities.

Most important of all, Packard has had the ingenuity—born of 50 years of successful, competi-

tive experience—to make new and increasingly effective use of the facilities at its command.

* * * * *

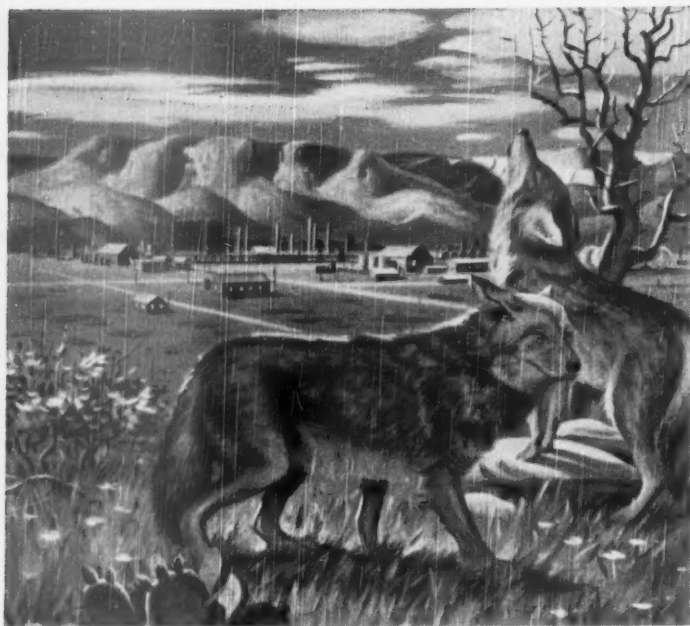
The development of Packard Ultramatic Drive is a good clue to the strong resources, and the production ability of the Packard Motor Car Company.

Packard Ultramatic Drive is available now, at reduced extra cost, on *all* models in the 1950 Packard line. Thanks to rapid gains in Ultramatic Drive production, it will be possible to equip approximately 70% of all 1950 Packard cars with this popular feature.



PACKARD

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tion's personal-income level has been rising, the industry has been able to nab off a gradually increasing share of disposable income (income of all persons from all sources after taxes have been deducted).

• **Television**—A new factor on the credit side of the industry's ledger is the spreading influence of television. People now may be spending more leisure hours at home. This has spotlighted the dowdy state of many living rooms throughout the country and made the owners decide it's high time to spruce up.

At this point, the Dept. of Commerce can find few flies in the ointment. One trouble, for instance, that plagued the industry last year—swollen retail inventories—has now disappeared. The retailers took care of those when the going got rough. Today's inventories are lean.

If there's any trouble in the industry now, it's one that bothers almost every other industry: rising costs. Commerce thinks that many furniture makers are only getting around belatedly to stressing efficient operation and cost control.

• **Design**—The department thinks that the industry would also do well to stress quality control and design. Here are the major trends it advises them to keep an eye on:

• **Functional furniture.** Top among style and material changes are the reduction in size of both upholstered furniture and case goods to fit today's smaller houses and apartments. The development of the small housekeeping unit has created a demand for furniture on a smaller scale. A natural corollary has been an increased demand for dual-purpose and other types of functional furniture.

• **The trend to modern.** This is catching on fast. Chinese modern—the most recent addition—was introduced in high-priced prestige lines recently (BW—Jul. 16 '49, p. 26) and quickly spread to all price levels.

• **Foam rubber.** Use of this material has been making strides in the upholstered field as well as in the field of bedding.

• **Unpainted furniture.** The growth in sales of unpainted pieces (from \$600,000 in 1939 to a postwar \$15.4-million) is a reflection of the public demand for low-cost furniture.

• **Metal kitchens.** Wood is rapidly being replaced in kitchen furniture design. Metal furnishings have zoomed from a \$14-million figure in 1939 to \$144-million in 1947. Half this 1947 figure was for metal kitchen cabinets, while tubular metal breakfast sets accounted for \$57-million.

• **Juvenile furniture.** Value of shipments increased 50% between 1939 and 1947.



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one-third of all industry's products (\$60 billion in 1949) is your *biggest* market.

Make sure you sell to Metalworking with peak effectiveness this year. And make sure, too, that *American Machinist* tops your advertising lists.

This magazine is read by more metalworking men, more metalworking executives with buying power, more production executives who actually manufacture Metalworking's products, than any other magazine which serves this industry. Manufacturers who sell to Metalworking place their largest advertising investment in *American Machinist*. Our representative in your nearest McGraw-Hill office can give you all the reasons why.

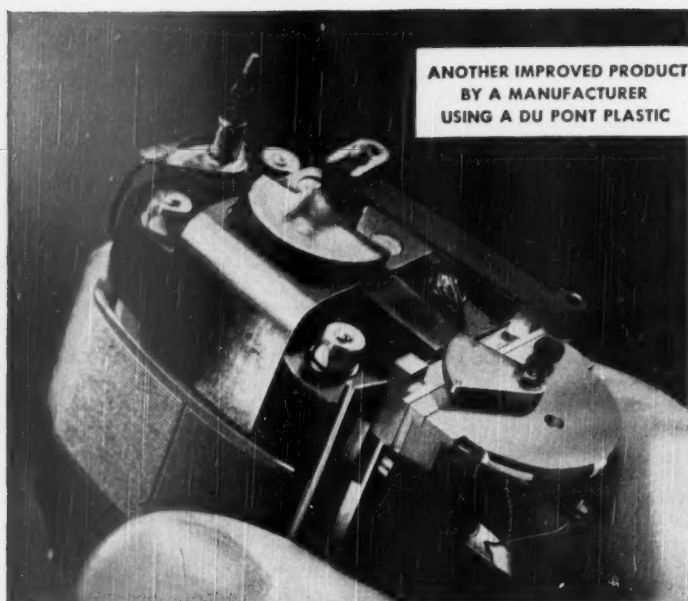
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THE MCGRAW-HILL MAGAZINE OF METALWORKING PRODUCTION

MCGRAW-HILL BUILDING, NEW YORK 18

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NYLON PLASTIC DRIVES NEW ELECTRIC SHAVER

Connecting rod and three other parts of molded Du Pont nylon improve shaver operation . . . minimize need for lubrication

IN DESIGNING their new electric shaver, the Sunbeam Corporation sought the best possible material from which to produce the connecting rod used to transmit power from the motor to the cutter blade. This part has to reciprocate at speeds from 15,000 to 17,000 half-cycles per minute. It has to prevent transmission of shock from the cutter blade to the motor shaft. It has to be light enough to keep vibration at a minimum. And it has to give long, trouble-free service.

After testing essentially every material that had any possibility of meeting these requirements, Sunbeam selected Du Pont nylon plastic. Weighing only one-eighth as much as metal, nylon provides the necessary strength, toughness, resiliency. It absorbs vibration and shock. And, cored with a 1/16" hole packed with a small amount of grease, the nylon connecting rod is ready for ten years or more of perfect operation without further lubrication.

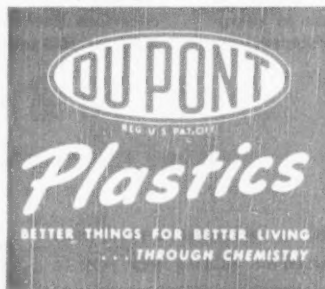
Three other parts of molded nylon are used in the new Sunbeam shaver. All play their part in speeding production, lightening weight and improving shaver performance.

Look into molded nylon parts for improving your product and its production. Nylon offers cost savings over other materials in many cases because of rapid, mass-production injection-molding, lightness of weight (which

makes it cheaper than metals on a volume basis), and superior performance. In moving parts, nylon provides quiet operation either with no lubrication or with less than that required by other materials. Write for the facts today. We'll gladly suggest suppliers of molded nylon parts . . . gladly work with you in developing nylon parts to fit your needs. E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Dept., Plastics Sales Offices: 350 Fifth Ave., N. Y. 1, N. Y.; 7 S. Dearborn St., Chicago 3, Ill.; 845 E. 60th St., Los Angeles 1, Calif.

Nylon parts for Sunbeam Model W Shavemaster by Chicago Molded Products Corp., 1024 N. Kolmar Ave., Chicago 51, Ill.

TUNE IN Du Pont "Cavalcade of America"
Tuesday evenings—NBC—coast to coast



Trade Still High

FRB reports January department-store sales were down a bit from last year, but still remain good.

If January department-store figures are any indication, retail sales are rolling along on a pretty high plane. Actually, in dollar volume, January department-store sales are behind the 1949 showing; but they're still high and healthy.

The Federal Reserve Board's index of department-store sales for January, adjusted for seasonal variation, showed a 4% drop from December. In January, 1949, the dip from December amounted to 6%. You have to remember, however, that the price level has dipped from January, 1949. That means that the retailers are still pushing about as many (or possibly even more) units as they were last year.

• **Inventories Good, Too**—Meanwhile manufacturers see some pleasant news in the figures on department-store inventories. Although the figures for January aren't in yet, there's no doubt that stocks are almost paper-thin. In December, the FRB's seasonally adjusted index of stocks showed a decline to 271 from 273 in November. The December figure compares very favorably with 288 for December, 1948, and 278 for January a year ago.

The background of this year's inventory situation is, of course, fairly clear. Department stores went into the Christmas season with slightly low inventories, then had a good December saleswise. That meant that they wound up the year with clean and manageable inventories—which reduced the number and sweep of the January clearance sales that are a normal feature of the month (BW—Jan. 7 '50, p23).

With store inventories at such a low level, consumer buying is felt almost immediately by manufacturers and suppliers. And with personal income running at a rate of some \$212-billion, there's bound to be plenty of retail buying.

• **Hard Goods Strong**—The year-end figures on other types of retailers show sales still on a high plateau—with slight dips here and there, and a changing composition of sales. Sales of all retail stores dropped to \$128.1 billion in 1949 from \$130 billion in 1948. But durable goods, mainly on the strength of bigger auto and appliance volume, inched up from \$38-billion to \$39.5-billion.

Only four groups of retailers did better in 1949 as compared with 1948. Dollar volume of auto retailers rose

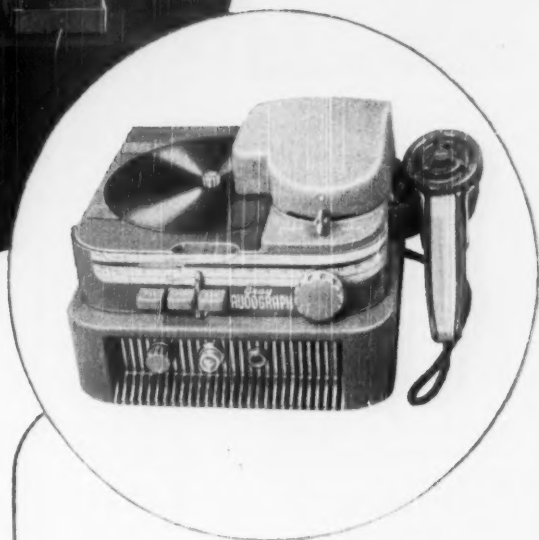
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For other retailers, 1949 sales were under 1948's by varying small percentages. After adjusting the dollar figures for the falling price levels, however, you can see that U.S. retailers are still moving incredible quantities of merchandise.

MARKETING BRIEFS

Newspaper circulation continues its postwar climb, reports N. W. Ayer & Sons. Morning dailies (20.1-million circulation) have gained more than 6% since the war, evening dailies (30.9-million) almost 6%. Sunday newspapers (44.7-million) about 12%.

To qualify as a director of a frozen-food company, it's helpful to be a radio star. Bing Crosby has for some time been on the board of Minute Maid Corp. Now hi V Corp. (orange-juice and other concentrates) has elected Arthur Godfrey to its board.

Ad agency billings spurted again last year. Advertising Age finds 1949 billings of the nation's 47 top agencies topped \$1.2-billion—a \$90-million increase from 1948. Twenty-two agencies billed more than \$20-million each.

Simon & Schuster will experiment with paper-bound dollar editions of five books in its spring list. They will be printed on cheaper paper than the regular trade editions (\$2.75 up), which will be published simultaneously.

Zenith's Phonevision—the pay-as-you-look system of television (BW—Jul. 12 '47, p16)—will get a test whirl in Chicago now that FCC has given the nod. Zenith will telecast a feature film a day for 90 days, charge subscribers \$1 for each show they take in. Illinois Bell is leasing 300 telephone wires to Zenith for the test.

Educational campaign on nylon hostery for women—stressing d  n  r, fabric construction, selection, and care—will be launched by du Pont via radio, newspapers, and magazines.

The Hickok boy's line (belts, suspenders, wallets, jewelry) was put under a separate Hickok Mfg. division six months ago. Sales since then have jumped 200%. President Ray Hickok says the experiment proves that boy's accessories are "year-round sellers."



FARMERS Chandler (left) and Davis have high hopes as they start test-marketing...

Frozen Cider

Frozen juice concentrate helped the orange growers. Why can't it help get rid of apple growers' surplus?

For years New Englanders have made a heady brand of homemade applejack during the wintertime simply by sticking a barrel of fermented cider out in the backyard and letting it freeze. Now they've found a commercial application for the old idea. By freezing fresh apple juice they hope to do something about the apple growers' perennial headache: overproduction.

• **New Market**—Within the next week or so, Apple Concentrates, Inc., a new Massachusetts company, will begin selling 750,000 cans of concentrated frozen apple juice in New York City and several other test markets. If the tests work out, apple growers may have a new and badly needed national market for their product. Backers of the idea figure that there's no reason why frozen juice concentrate shouldn't do the same thing for apple growers—on a smaller scale—that it has done for the Florida orange growers (BW—Feb. 4 '50, p62).

Other companies have the same idea. Right now at least two other frozen apple concentrates are just coming on the market. One is made by a Michigan company, Cherry Growers, Inc.; the other by a Pennsylvania concern, Sunshine Packing Corp.

• **National Research**—Apple Concentrates is in part an offshoot of National Research Corp., the Cambridge (Mass.) organization that fathered Minute Maid Corp. National Research made its fame

A GREAT COMBINATION of ENGINEERING and PRODUCTION TALENTS



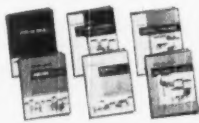
In answer to industry's need for super-efficient canning, bottling, carton, and other packaging production lines, Standard-Knapp has developed machines that quickly pay for themselves in reduced operating costs.

PACKAGING MACHINES



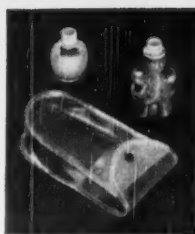
Standard-Knapp designs and constructs unloaders, unscramblers, rinsers, labelers, packers, gluers and sealers, case openers, and specialized accessories. These machines automatically provide packaging speed, performance and quality control.

FOR ILLUSTRATED FACT-PACKED LITERATURE, PLEASE WRITE



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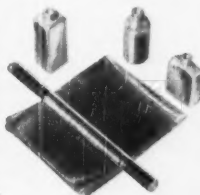
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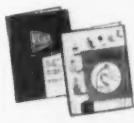
PLASTICS

bottles, film, rod, tubing,
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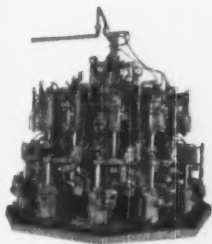
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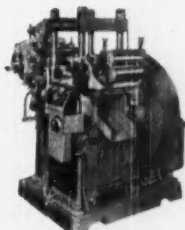
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TIME proves the durability of CONCRETE CONSTRUCTION



These 1923 and 1949 views of Bellevue Ave., Hammonton, N.J., illustrate the durability characteristic of concrete pavement. After 33 years this street carries weights and volumes of traffic never anticipated in 1917 when it was built; yet it still is good for many years. Across the nation scores of other concrete pavements thirty or more years old are also giving dependable service—long after the bond issues which paid for them have been retired.

Whether you're planning to build a pavement or a public building, a home or a hospital, a factory or a farm improvement, a school or a sewer, you'll want the endurance concrete provides. Concrete can be designed for long years of service under almost any conditions of use, under exposure to any kind of weathering. And by the cost yardstick of ownership—first cost + maintenance expense ÷ years of service—concrete provides a real low-annual-cost construction material.



PORTLAND CEMENT ASSOCIATION

33 W. Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of portland cement and concrete... through scientific research and engineering field work

during the war with its work in developing the high-vacuum process for drying penicillin. At the war's end, it set up Vacuum Foods Corp., which put the process to commercial use in producing frozen orange concentrate. Vacuum Foods (now Minute Maid) has since become a major factor in the new and growing orange-concentrate field.

With this in mind, two Massachusetts apple growers went to National Research last summer to scout the possibility of applying the process to apple juice. The two farmers were Jonathan Davis and Nathan Chandler, both of whom manage apple orchards and keep cows as sidelines. Richard S. Morse, president of National Research, liked the idea. The upshot was a frozen concentrate that, when mixed with three parts water, was equal to fresh juice in flavor and vitamin content.

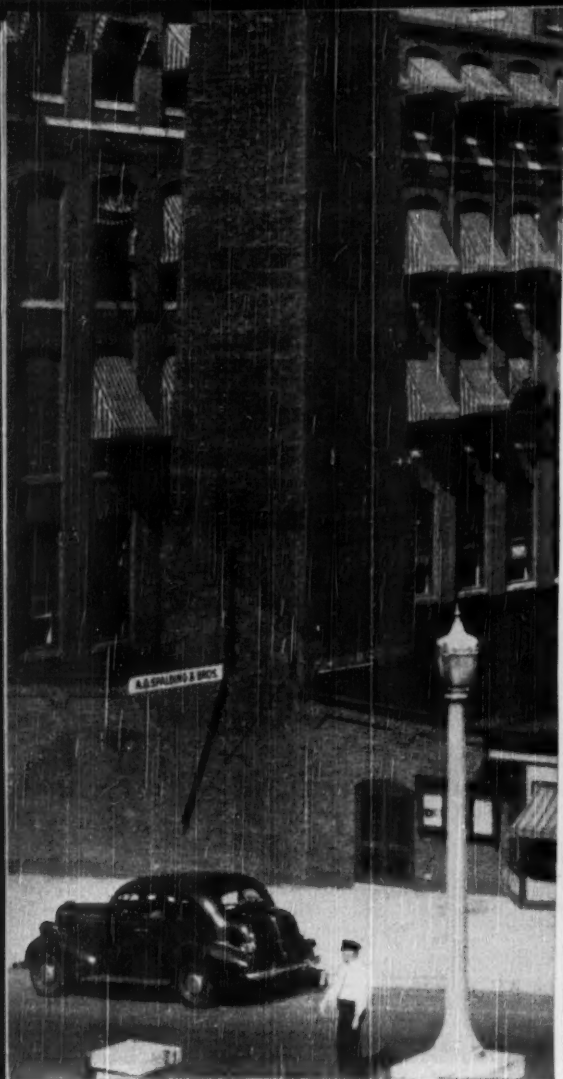
• **Financing**—Morse then helped set up the new corporation, with Davis as president and Chandler as treasurer. National Research contributed \$60,000 worth of equipment to the new concern's pilot plant near Concord. Along with the two originators of the idea, Morse became a director of the new company. The fourth director is John M. Fox, president of Minute Maid, whose company is handling the test marketing of the first 750,000 cans of concentrate under its own label.

All told, the new company scraped up \$125,000 for capital investment over and above National Research's investment in equipment. From Georges F. Doriot's American Research & Development Corp. (BW—Feb. 19'49,p6) it got \$50,000. Officers of the company kicked in about \$25,000. The remaining 55% came from 35 apple growers in the Nashoba Valley near Concord.

• **Apple Growers**—To get the growers in, Chandler and Davis had to work fast. It was apple-picking time in the valley, which meant night and day work to round up the 35 growers.

Meanwhile, the backers hastily assembled Apple Concentrates' pilot plant in an old Concord barn. It has a daily capacity for processing and canning 1,600 gal. of concentrate. Two weeks ago the plant began processing its stockpile of 40,000 bu. of apples.

• **Future Plans**—But Chandler and Davis are shooting higher than this. If the marketing tests pan out, they will go through with plans for a \$1-million plant somewhere in the Nashoba Valley. This would have enough capacity to process at least one-eighth of New England's annual 8-million bu. apple harvest. They plan a public stock issue in the spring. And eventually, the pair hopes to work entirely on an independent basis, using other outlets as well as Minute Maid for distribution and paying National Research only a royalty on output.



The New Face of U.S. Industry

Suppose the architect who designed A. G. Spalding & Bros. old plant just 100 years ago suddenly found himself inside Spalding's new plant—

He would run for the door before the fool building fell down on top of him.

In recent years the engineer-architect's knowledge has accelerated so rapidly that to a 19th-century builder almost any 1950 factory design would seem not just revolutionary but plain foolhardy.

Ponderous load-bearing walls have given way to a light strong skeleton, neatly engineered to eliminate dead weight. Walls are simple curtains, bearing no load.

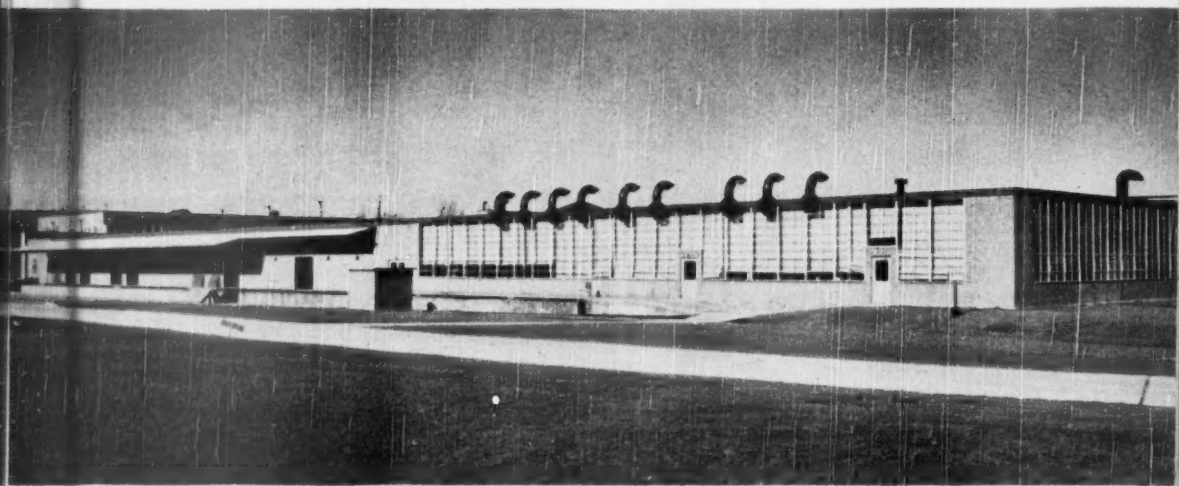
On the next seven pages BUSINESS WEEK reports on trends in factory design which have become evident since the war. Basic to all of them is the highly engineered structural frame and the curtain wall.

The New Face of U.S. Industry



IN 1850 The advanced new factory had a multi-story, gravity-operated layout. A good example is the 100-year-old New England plant at the left, recently vacated by A. G. Spalding Bros., Inc. Its heavy masonry construction and timber floors are typical of hundreds of factory buildings erected during the 19th century, factories that only now are going into the discard.

IN 1950 The trend is toward a one-story, horizontal layout—as in Spalding's new plant (below), and Continental Can Co.'s new Plainfield, N. J., plant (right). The load-bearing steel frame in the Continental plant is clearly visible in the photograph; curtain walls are not yet in place. Wigton-Abbot Corp. is the builder.



Architect Lathrop Douglass made back of A. G. Spalding & Bros. new plant just as handsome as the front (previous page).

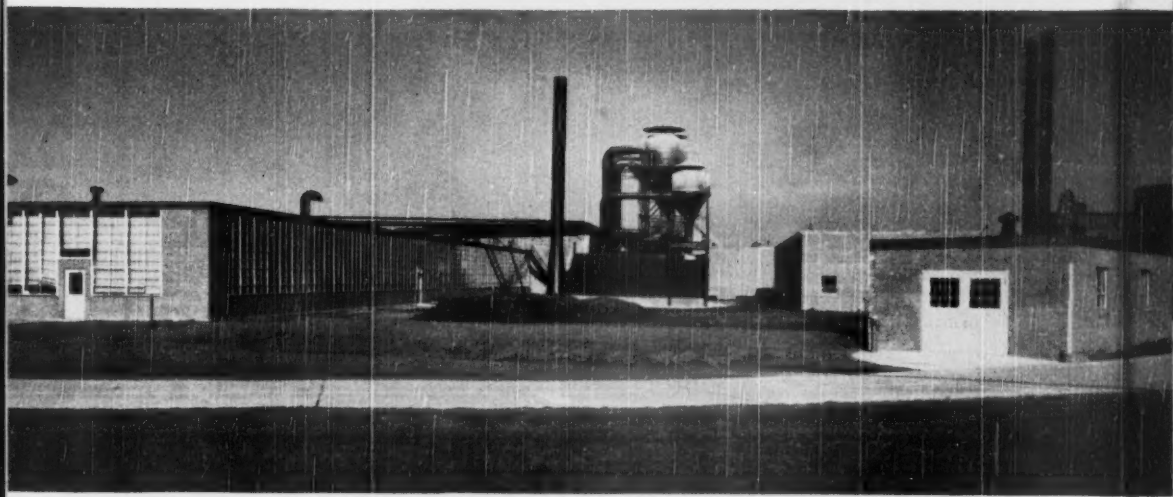
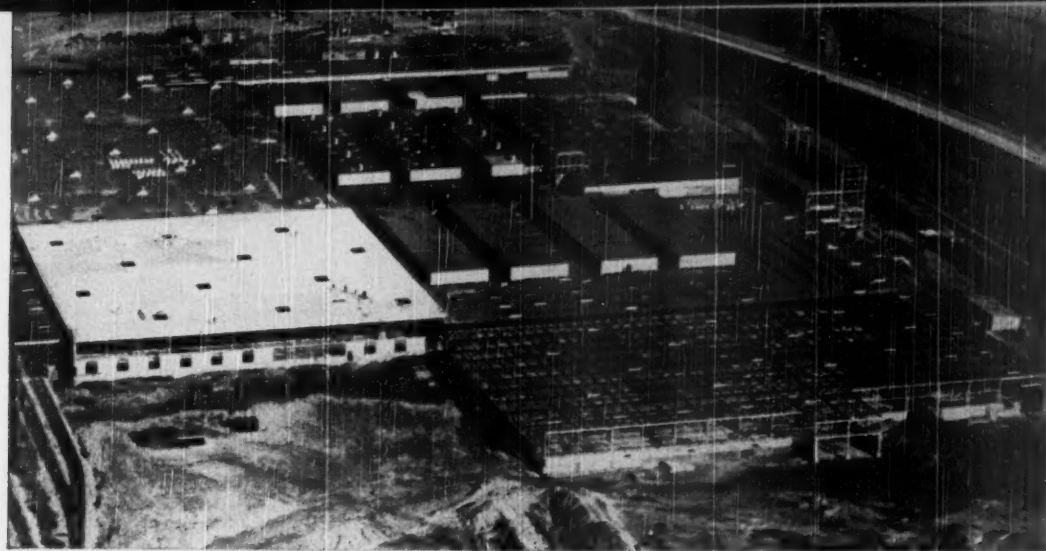
Strong trend today is toward the **HORIZONTAL FACTORY**, one story high with a dead-flat roof, often set off in suburban grounds.

Back in mid-19th century some U. S. manufacturers had a smart idea. They would hoist raw materials to the top of a multi-story plant. Then, by chutes, conveyors, and elevators the materials would move down floor by floor under their own weight, ending up as finished products at the ground level hard by the shipping room.

It was a great mass-production advance in those days. But then cities began herding new plants into carefully zoned manufacturing areas on the outskirts of town—where land was cheap and there was room to spread out.

New materials-handling equipment came along. A one-story plant with straight-line overhead conveyors lent itself to more efficient, speedier production. Tow tractors, lift trucks, and floor or machine-level conveyors all helped.

Today gravity operation is still widely used (typically



Douglass carried windows to roof, skipped usual brick at top. Engineer was Guy B. Panero; builder, John W. Harris Associates.

in the rayon industry, in certain soft goods manufacturing, and in chemicals). But the long-run trend favors a straight line operation in a one-story plant.

Costs had a lot to do with this. Of course you have to have cheap land for a sprawled out factory. But if you have it you need devote no unproductive building space to elevators and stairwells. Ventilation is straight through the roof. Raw materials can be discharged at track level and finished products loaded directly into freight cars or trucks.

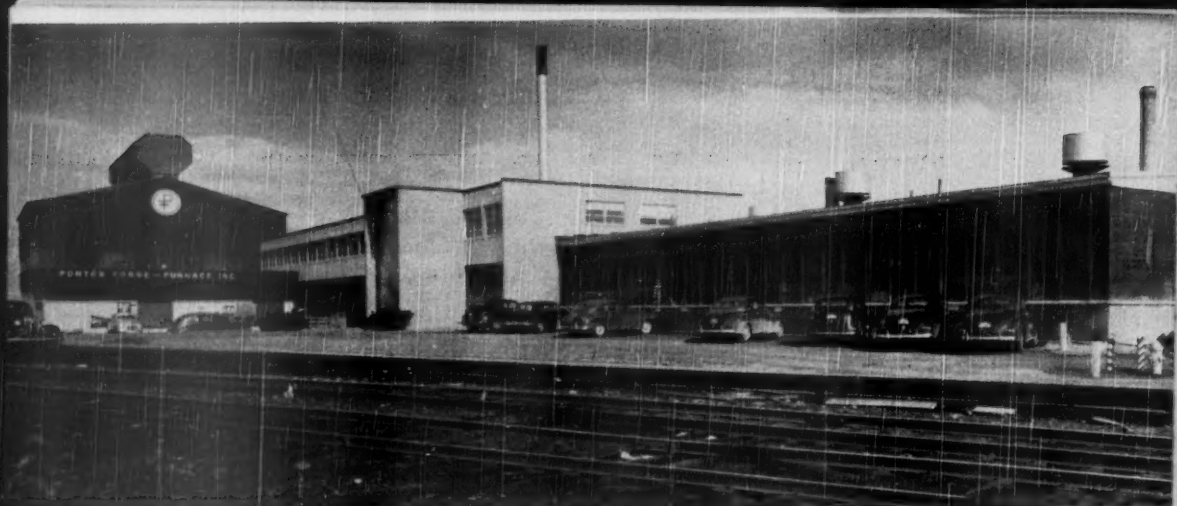
Recently industrial architects have given the horizontal factory a new touch—the dead-flat roof. It is cheaper to build, and there are no windows to clean and service. The familiar sawtooth and monitor roofs are on their way out. They are used today only when the production process itself makes them advantageous. Monitors, for instance, are still used in crane bays.

Another trend has become unmistakable. "When we decided to spend the money for our new plant I told them 'Let's spend a little more and make it the best damn looking plant in town.'"

This company president had more in mind than just a handsome building. Like many executives today he thinks it's worth the extra cost to set his handsome plant down in a generous landscaped area of land—big enough for expansion and then some.

Whether such men are consciously sensitive to the "industrial slum" kind of criticism or just have a sharp eye focused on community relations, the trend is there. "We are part of the town and we want the town to be proud of us."

But some companies have good reason to buck the horizontal, flat-roof trend. →



PORTER'S CASE: This new plant, jointly occupied by H. K. Porter, Inc., and Porter Forge & Furnace, Inc., includes both one-story and multi-

story construction, flat and sloping roofs, masonry, glass brick, and corrugated steel sidewalls. Reason for this varied design: The plant is tailor-made to fit the special needs of

The most important single trend in 1950 factory-planning:

TAILOR IT TO FIT THE JOB

A production building is an integral part of the production process itself. It ought to be designed that way. That was the idea H. K. Ferguson Co. followed in designing Corn Products Refining Co.'s 140-acre Bluebonnet plant at Corpus Christi, Tex. (upper right, opposite page).

Ferguson's approach is hardly uncommon in today's industrial architecture. But the new Corn Product's buildings are certainly unusual, both in their functionalism (BW—Nov. 12 '49, p. 44) and in their beauty. They got that way, says Frank L. Whitney, project architect for Ferguson on the job, because "true basic architecture is in the process."

Today an industrial architect starts work by studying the production job to be done. He gathers estimates of immediate and future output. He equips himself with a production flow chart, and he studies the operation as it works in his client's existing plants.

Costs and efficiency, not precedent, are the criteria. The architect, working intimately with his clients' engineers, will often come up with ideas for streamlining the basic production process itself. His building—one story or multistory, walled or wall-less—will become a part of the production process.

Planning a new factory is no overnight process. Usually it takes many months of painstaking work. In the case of H. K. Porter, Inc., and Porter Forge & Furnace, Inc., (above) the design was in the works five years.

Actually the new Porter setup is two plants in one. The lofty forge shop at one end is separated from the

one-story tool-making plant at the other end by a two-story office building, serving both plants.

Because Porter makes a widely varied line of tools a straight-line layout didn't make sense. So architect Walter F. Bogner and Porter engineers together worked out a loop flow system in which production revolves around a central receiving and shipping area. Surrounding the production loop are storage areas out of which raw materials, and sub-assemblies are fed to the line.

That production layout needed a big rectangular open space, all on one level. It is provided by the single story building in the foreground (which is bigger than it looks; the far corner is off behind the two-story office building).

Bogner designed the Porter plant for worker comfort as well as for production efficiency. Walls of the forge shop roll up in summer, practically moving operations outdoors. A roof terrace is available for employees.

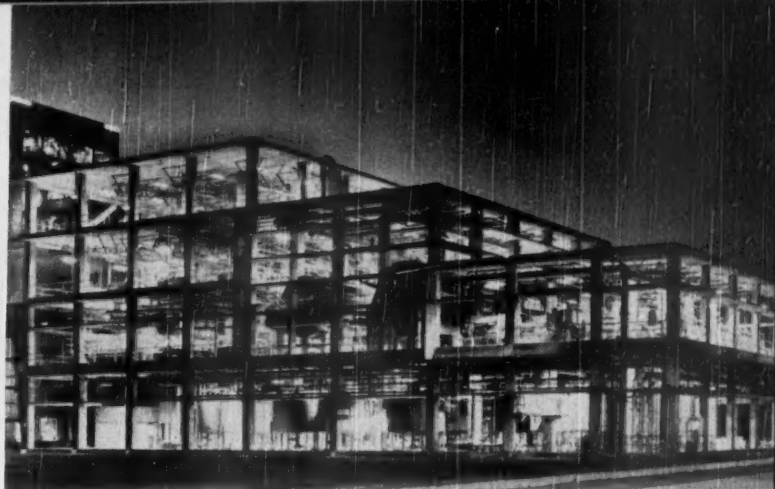
The nature of the labor force itself sometimes determines the location and design of a factory. Some light manufacturing operations, using skilled workers hard to replace, must stick to multi-story construction in the heart of the city. Typical is Florsheim Shoe Co. (opposite page) whose striking new plant is just outside Chicago's loop.

Florsheim's plant is a classic gravity operation. Hides are cut on the top floor, leather and shoes move down by elevator and conveyor. The Florsheim building houses two complete but separate shoe factories, both fed from the top floor cutting room.

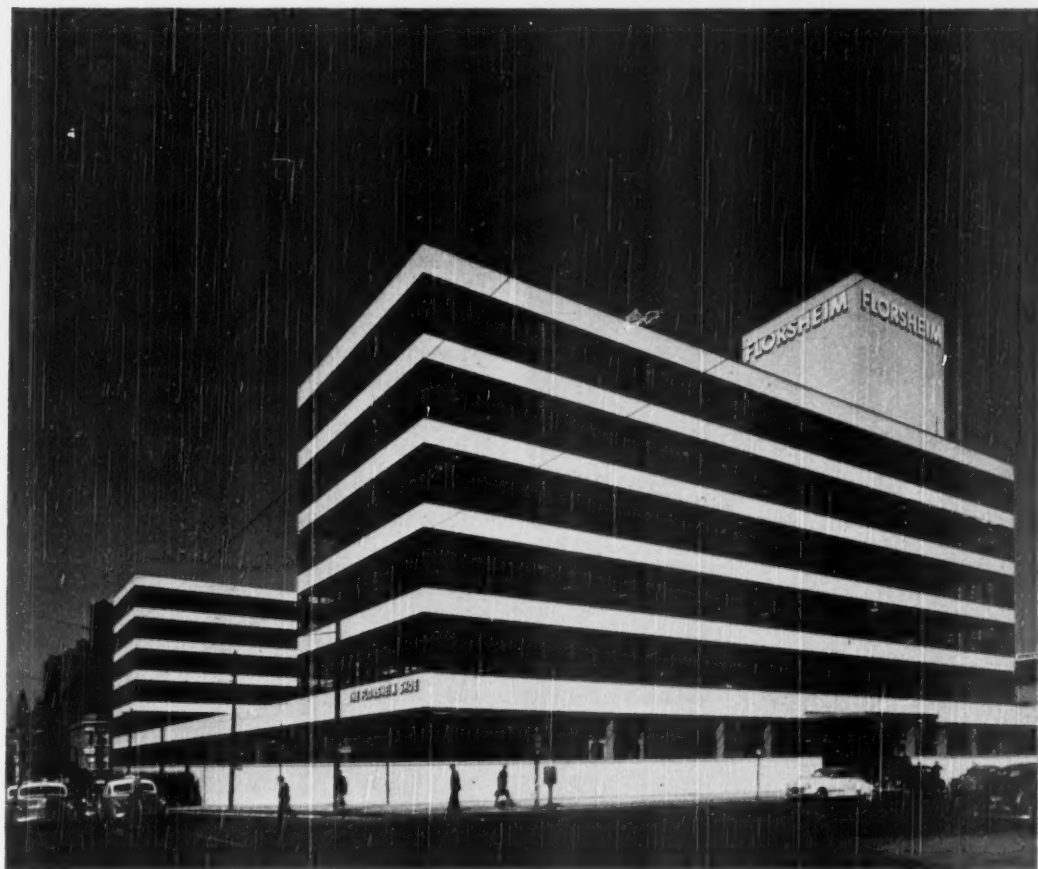
Shaw, Metz & Dolio, architects and engineers for Florsheim, considered E, H, and rectangular plans before deciding on a U plan for the plant. The U plan puts manufacturing operations along a daylighted perimeter, with elevator and service facilities at the center. Processing starts on each floor at the elevators, moves around the perimeter, and ends up again at the elevators.



the two companies (see text). For employees it includes second floor locker rooms, canteen, recreation terrace.

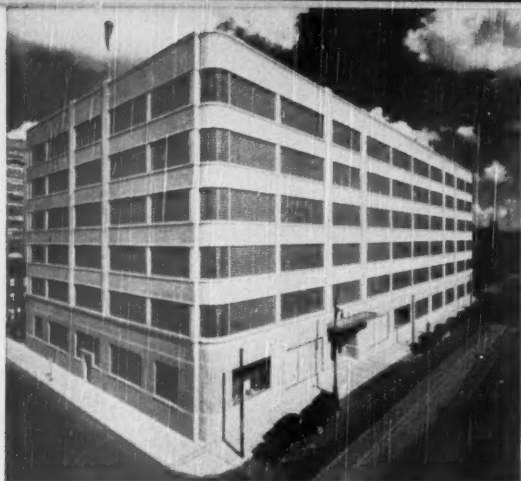


CORN PRODUCTS' CASE: Walls were eliminated where possible in Corn Products Refining Co.'s new Bluebonnet plant. In mill house, above, sunshades and roof alone protect machines from weather.

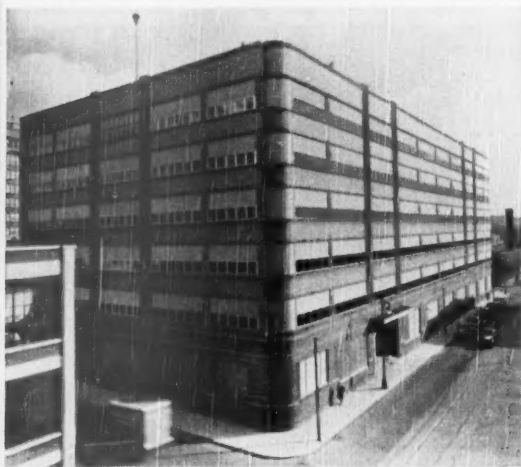


FLORSHEIM'S CASE: In a city, high land cost argues for multi-story construction. Florsheim Shoe Co.'s new plant, across the street from Chi-

cago's Union Station, has one office floor, five factory floors, 300,000 sq. ft. of work space. The "U" design provides natural light on all four sides of the factory floors.



CAN'T SEE OUT Detroit Edison's air-conditioned plant needed sealed, insulated walls. Glass brick did job, but workers couldn't see out.



CAN SEE OUT When thermal glass became available, Detroit Edison installed transparent windows. Now workers can see out, like things much better.

What "Production Climate" Do You Need?

Upon your answer depends the engineer-architect's choice of wall, window, and roof, of lighting, paint, ventilation, and heating.

A factory is a place where work must get done. To get it done more cheaply and efficiently the climate inside the plant is all-important.

So, in a well-designed factory today the interior climate is either completely controlled, or partially controlled—it is not left uncontrolled. (For "climate," in this context, read: lighting-temperature-air circulation-humidity-noise.)

Complete climate control is still a rarity in U.S. factories, but its high cost is worthwhile in some industries, notably electronics.

The Western Electric plant in Allentown, Pa., (picture below) built by Austin Co. in 1948, is an example of the true controlled-conditions factory.

Atmospheric dust and fluctuating temperature can play hob with intricate electronic assemblies. The Austin Co. made the building itself do much of the climate control job. Solar heat is soaked up by a 13½-in. insulated wall. Windows are limited to a 30-in. strip double-glazed with solar glass.

The plant, air conditioned throughout, has an inside air pressure slightly higher than atmospheric pressure. No dusty outside air can push its way into the plant when a door opens.

Not many plants need go as far as Western Electric has in controlling production climate. But certain minimum controls are pretty nearly universal.

Good light is one thing: It promotes efficiency and safety. But you can't depend on natural light; it's much too variable. That's one reason why overhead windows and skylights are on their way out. As F. A. Fairbrother, chief architect at Albert Kahn, Inc., Detroit, likes to point out, no matter how many windows a plant has all the lights are turned on anyway.



VISION STRIPS is what Austin Co. calls these slim, ribbon windows in new air-conditioned plant it built for Western Electric. Main building, at right,

has 100 ft. clear spans. The plant is set in a 50-acre country plot near Allentown, Pa. It has large recreation area for employees, parking lot, railroad siding, landscaped grounds.

Does this mean eliminating windows entirely? Fairbrother thinks not, and most industrial architects agree with him. Windowless factories are still being built, notably Lincoln Electric's striking new Cleveland plant (page 62). But they are no trend. Architects and engineers admit the efficiency of windowless construction for many manufacturing operations but say that worker psychology argues against it.

Fairbrother, for example, cites cases where workers have put up pictures in an effort to offset the closed-in feeling of a windowless room. A man likes to look out occasionally if for no other reason than to rest his eyes or see if it has stopped raining, Fairbrother says.

But windows in most new plants are not a primary light source. The trend is to use fluorescent units big enough to supply about 30- to 50-ft. candles at the workbench. (BUSINESS WEEK has heard of one new plant that found 100-ft. candles not too much.)

Steam continues to heat most new factory buildings, most often through down-blow or projection unit heaters. Radiant heating is still in the future; there have been few installations yet. Costs are high, and many engineering problems remain.

Forced air ventilation seems to be the thing, rather than full air conditioning. In many cases such a system permits cheaper wall construction—fixed glass, with no windows opening. Air intakes and exhausts are mounted along the roof.

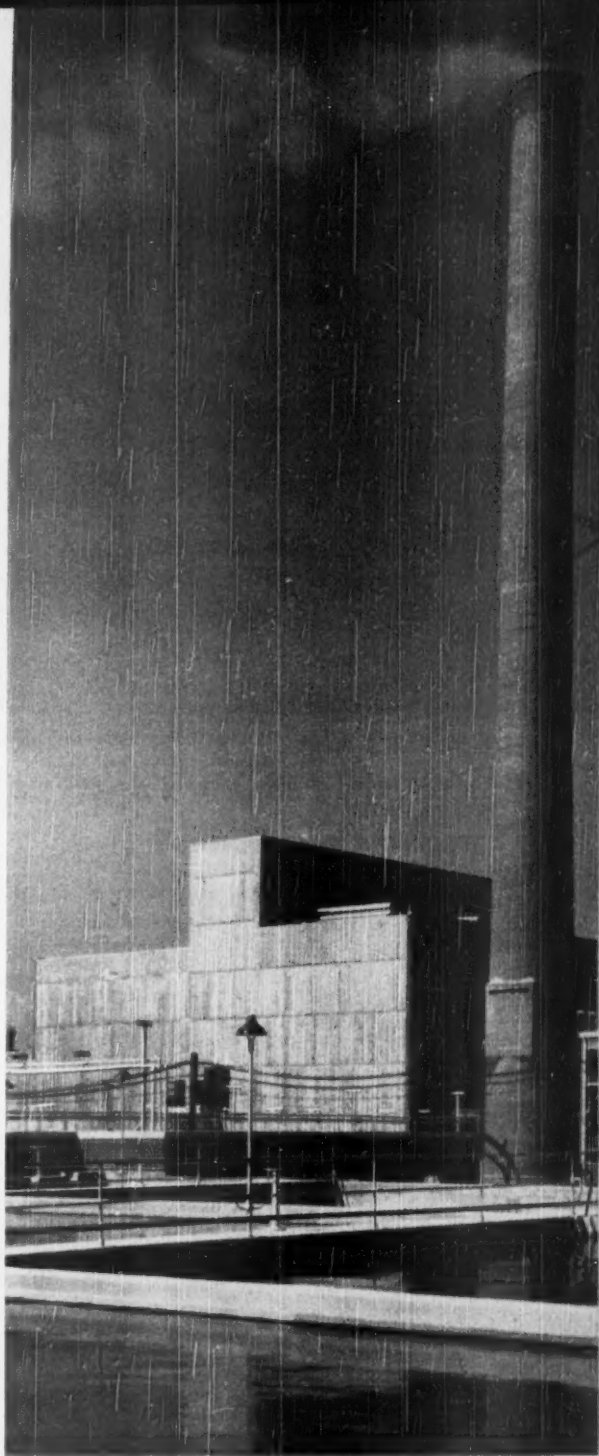
Some industrial architects think that factory air conditioning may become important before too many years. They point to the increasing use of air conditioning in the South. And they cite examples of northern corporations which are experimenting with complete plant air conditioning now.

One auto manufacturer agreed to install air conditioning in a new plant it was building in the Middle West last year. Then someone suggested that the workers in the company's older plants might reasonably ask for a little of the same for themselves.

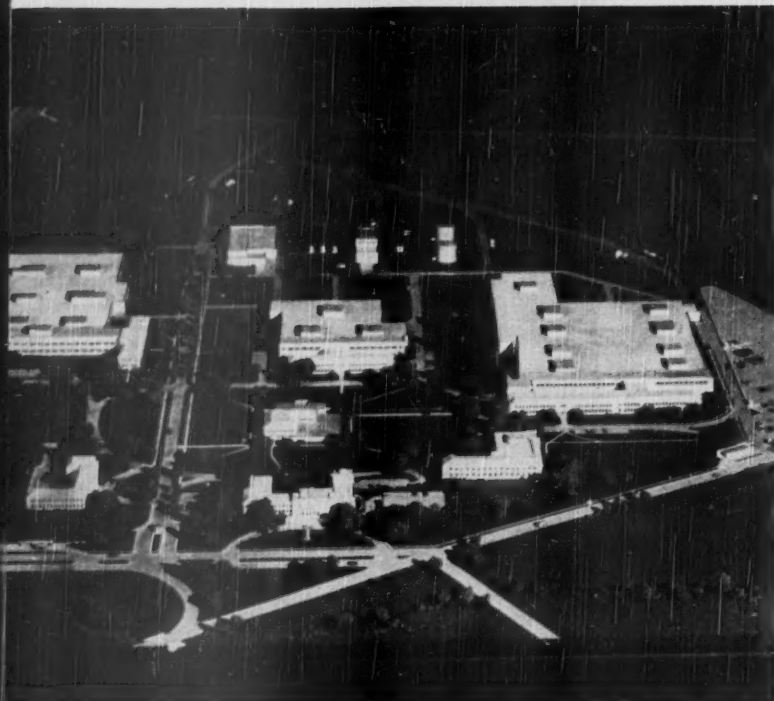
The auto maker checked the cost of putting air conditioning in his old plants, shuddered, and dropped the whole idea. But interestingly, space was allowed in the new plant for future installation of coils, compressors, and ducts.

If air conditioning is not yet an accepted part of factory climate control, these are: insulation, acoustical construction, and color planning. Insulation, of course, cuts heating bills in winter, increases worker comfort in summer. Noise reduction has its effects on production efficiency, safety, and makes for good will all around.

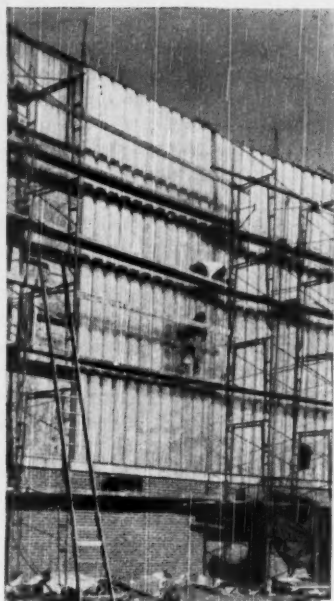
The planned application of color in a factory pays off in a number of ways. Directly, of course, the right color combinations can reduce eye strain and increase lighting efficiency. But in the hands of an experienced engineer they can also have some less obvious benefits. Color can "cool off" a hot and oppressive room; it can also be used to separate a machine visually from its background. It can help promote worker efficiency at the machine; it can even make a small room seem larger or a distant wall closer at hand.



WINDOWLESS end wall is feature of American Enka Corp. plant built by H. K. Ferguson Co. Removable aluminum panels allow for future expansion.



ELECTRONICS PARK is more like a campus than an industrial plant. Large buildings in General Electric's development are factories; others include laboratory, cafeteria. Giffels & Vallet, Inc., were architects.



BREATHING WALL in new Lincoln Electric plant built by Austin Co. (see text).

Tomorrow's Factories?

What will tomorrow's factories be like? A look at certain characteristics of today's new plants, and a look at some of the new materials just coming into use suggest the answer.

Right now the two most important structural materials are steel and reinforced concrete. The most-used side-wall material is still brick, at least for exterior facing.

But changes are coming. Prestressed concrete is certainly one future headliner among structural materials. It permits lighter concrete structures, with wide spans.

Precast concrete is also due for wider use, as is lightweight concrete in which gravel is replaced with light materials like pumice and vermiculite. One engineer puts all these concrete trends together and foresees precast, prestressed, lightweight concrete as a material that will stimulate entirely new factory designs.

Some of tomorrow's sidewall materials are here now. Mostly they are prefabricated or precast panels, usually of metal. One of them is a kind of sandwich (picture above). It is built up of layers, an inside sheet of carbon steel, a filling of inert insulation, an outer layer of corrosion-resistant metal—aluminum or stainless steel. Such a wall is cheap to erect and maintain, it has good insulating quality and vents set up air circulation inside the wall to keep the insulation dry. Also it can be taken down and re-erected when a plant expands (picture, page 61), a real advantage over brick or concrete.

Also possibly ahead: the suburban factory complex. The suburban factory is here now. General Electric's new development at Syracuse, N. Y., Electronics Park, (picture, above) suggests the next form it may take.

In the new GE development, three manufacturing plants, an administration building, a cafeteria building, a laboratory, and several service buildings are arranged on a 135-acre landscaped tract. The whole place has an uncrowded, campus-like atmosphere. It was obviously designed to be a pleasant place to work. And its design can't help but tickle the civic pride of Syracuse.

These characteristics of General Electric's new venture are probably more significant than the high production efficiency of the Electronics Park buildings themselves. Factories are truly becoming almost machine-like in their functional design. But they are also becoming a lot pleasanter to look at, live with, and work in.

REPRINTS AVAILABLE

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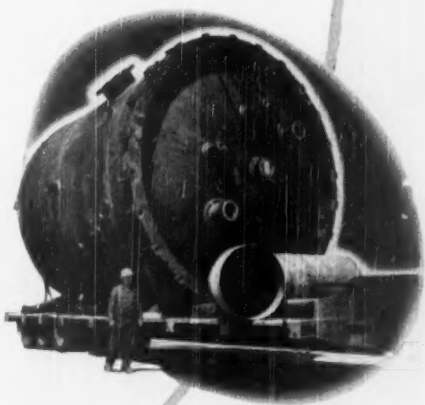
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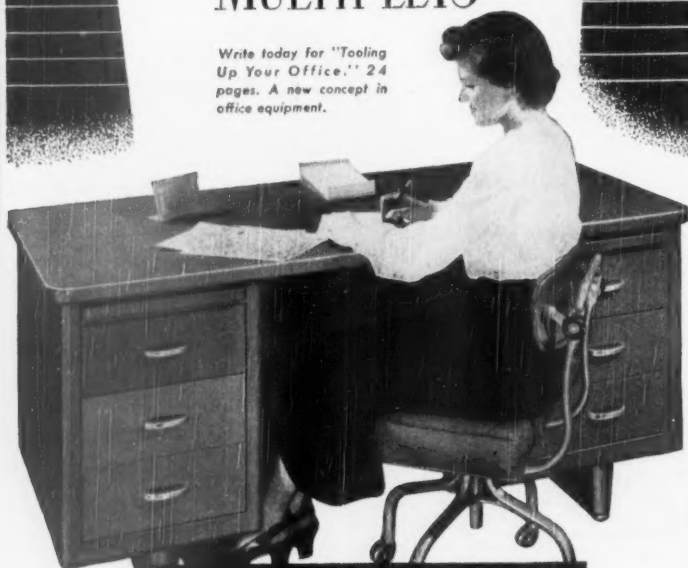
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READERS REPORT:

Home Owner Speaks

Sirs:

The fury of the press and political circles of Washington is focused on the failure of Lustron Corp. to meet its RFC obligations. The general attitude is vindictive: Another government venture has failed.

But has it failed? There is never any opinion about the merits of the Lustron home from those who have lived in one. There are no statements about how the Lustron home provided a family with the best type of dwelling it could obtain at the contract price, how Lustron enabled the home buyer in small towns and villages to obtain a home with construction qualities beyond the scope of the few local builders.

Unfavorable criticism, local and national, is usually forthcoming from those who have never been inside a Lustron home or who will suffer financially from its erection. No congressmen have contacted Lustron home owners to obtain their sentiments. No press man has ventured to survey Lustron homes. Yet, condemnation hangs heavy. If TVA had been compelled to meet similar requirements, it is likely that it too would have failed. But there is no condemnation of that venture because of its human betterment qualities.

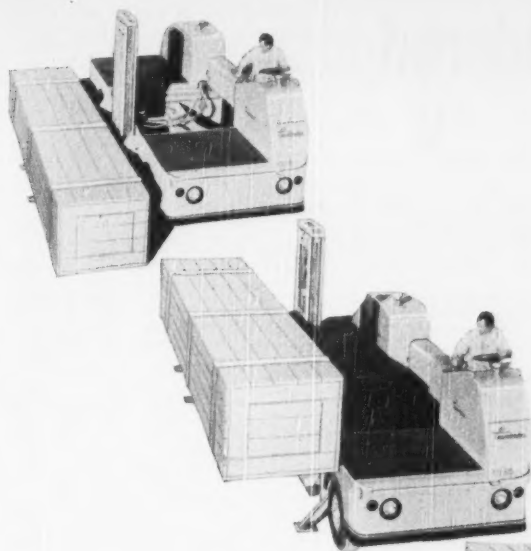
Lustron, too, has improved the lot of many an American family. Ask those who reside in a Lustron home and I'm sure that the general opinion will be unanimous in its favor. And there has been less than one year of actual trial with the home, with most of that time being devoted to the establishment of suitable dealer, crew, and service organizations. The Ford Motor Company did not get into full swing in one year.

I bought one of the first three-bedroom models in this section of the country and have lived in it for two months—two of the most rugged winter months. Absolute satisfaction is my verdict on every count, including storage space. The interest aroused in other prospective home buyers has been considerable. Should Lustron be scuttled, it would be a severe loss.

BERNARD E. KINSOCK

CUBA CITY, WIS.

• The quality of prefabricated houses, or of the Lustron house in particular, has not been at issue, so far as BUSINESS WEEK knows, in the controversy. The real issues appear to be the skill of Lustron's management in producing and marketing their houses, and the wisdom of the RFC in lending \$37.5-million to a company with only a few



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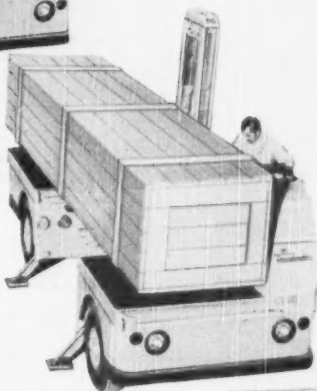
New hydraulic side-loader, one-man operated, picks up, carries, unloads, transfers or stacks any materials from 8 to 66 feet in length.

These pictures, from left to right, show the loading cycle of the Lull Traveloader. In twenty seconds the machine *loads itself from the side* with 10,000 lbs. of steel, palletted material, timber, pipe, poles or other cargo.

The Traveloader is a combination fork-lift truck and motor carrier. Its side loading principle permits straight-line pick up, carry and delivery without backing or turning . . . expands storage space!

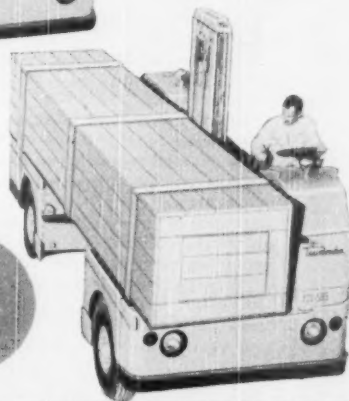
Retractable hydraulic jacks give rock-solid stability for loading or unloading. Heavy steel forks on the telescopic lift-tower move cargo up, in and down in one smooth motion. Load is brought to rest on broad, strong platforms with weight distributed *equally* on axles and wheels. Then jacks retract and Traveloader *travels*—at speeds up to 30 MPH.

For a complete picture-story of the Lull Traveloader, mail coupon below. Then make your own estimate of the number of jobs the Traveloader can do for you.



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Sirs:

Of all the 300,000 or so entries in the unabridged dictionary, you could have scarcely chosen three more inappropriate words to describe the relationship between the West Shore Co. and the Ventura Land & Water Co. [BW—Jan. 28 '50, p. 88].

Ventura Land & Water Co. is about three times as old and ten times as big as the West Shore Co., and they are completely independent of each other. There was no possible reason for any mention of Ventura Land & Water Co. in your article.

LOYD M. SMITH
PRESIDENT, WEST SHORE CO.
LOS ANGELES, CALIF.

Sirs:

As Sales Development Manager of Loew's Inc., distributors of Metro-Goldwyn-Mayer pictures, I am very interested in your article "Hollywood Shakes Its Slump" [BW—Feb. 11 '50, p. 82]. Being very proud of the M-G-M organization and its personnel, I would like to point out that Dore Schary is not "Warner production chief" as you say in the article. As vice-president in charge of production for Loew's, he is producing *The Next Voice You Hear* which you refer to—but for Metro-Goldwyn-Mayer.

GEORGE C. MAURER
METRO-GOLDWYN-MAYER PICTURES
NEW YORK, N. Y.

Electronic Organ

Sirs:

In your article "Organ Sales Stage Comeback" [BW—Feb. 11 '50, p. 34] you mention several firms who produce organs which use oscillating vacuum tubes. It so happens that we were the first company to produce commercially electronic organs using oscillating vacuum tubes (1940). Allen organs are sold nationally and internationally. We are the "small" manufacturer who has carved a "niche" in the industry.

ROBERT PEARCE
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ALLENTOWN, PA.

Business Week Fiddles

Sirs:

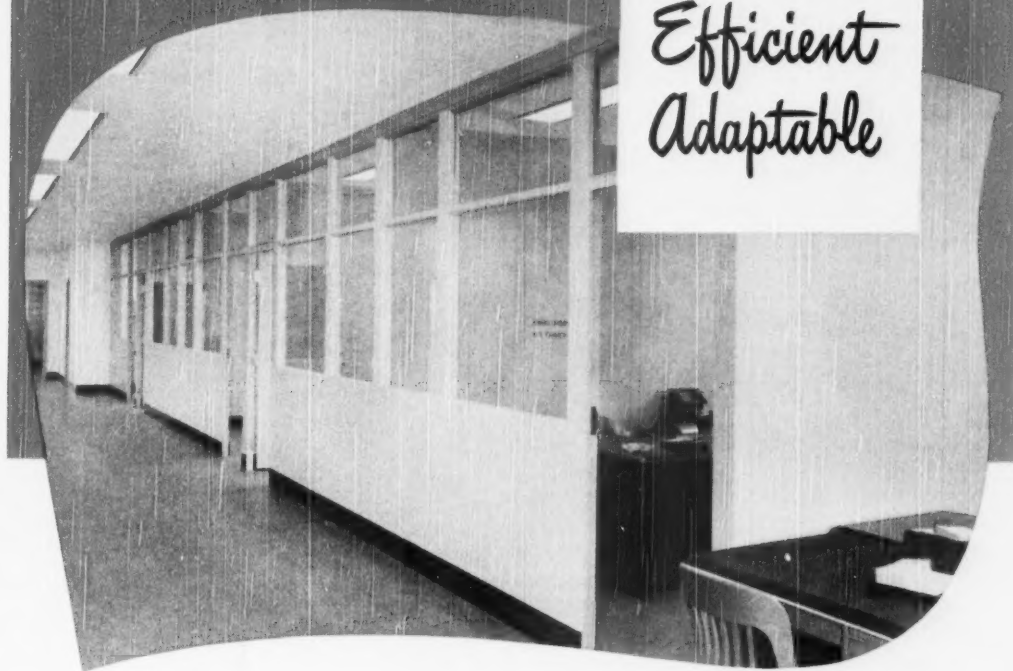
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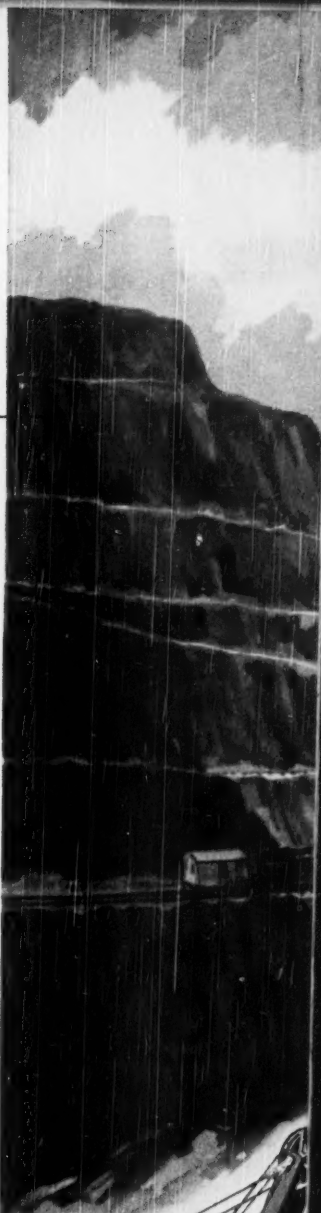
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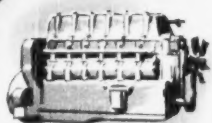


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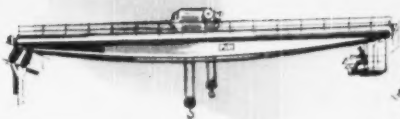
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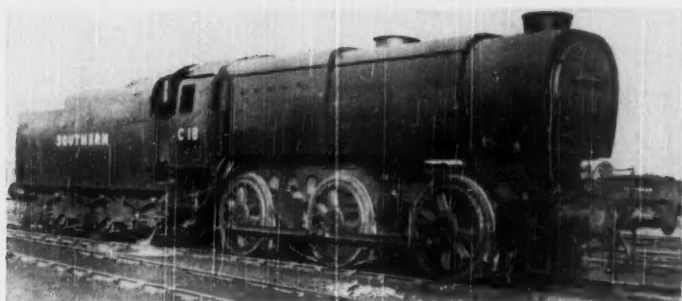


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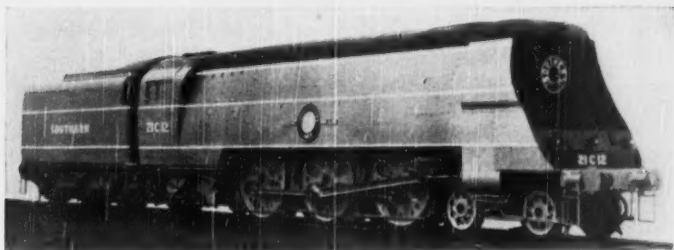
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PRODUCTION



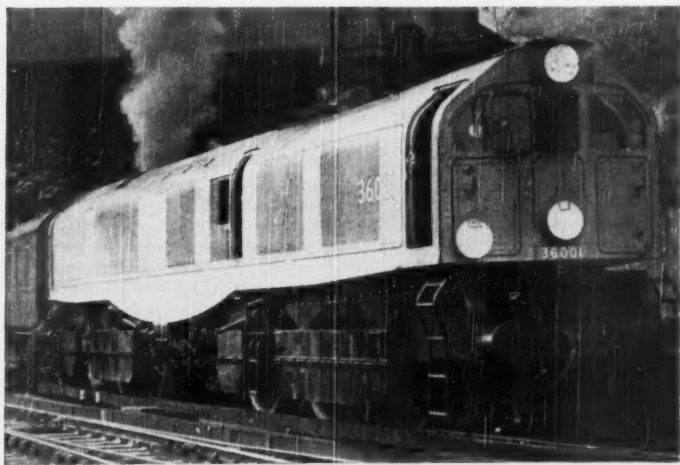
FIRST EXPERIMENT: Q-1 was the first of the new steam locomotives the British put on the rails. This one has an oversize boiler, new-type smokebox.



SECOND in the series was the Merchant Navy. It uses a three-cylinder power system, continuous lubrication of some parts, and welded fireboxes to cut maintenance and costs.

Steam Engine Still King in Britain

British research tries to get same economies from steam U. S. gets from diesel-electric power (Story on next page).



LEADER is the latest test model. It looks like an American diesel-electric and, like one, can be hooked up in units. All moving parts are enclosed. It carries a water softener.



Production and profits go up, costs come down, wherever you can adapt a Yoder cold-roll forming machine for quantity production of things heretofore made by other methods.

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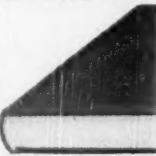
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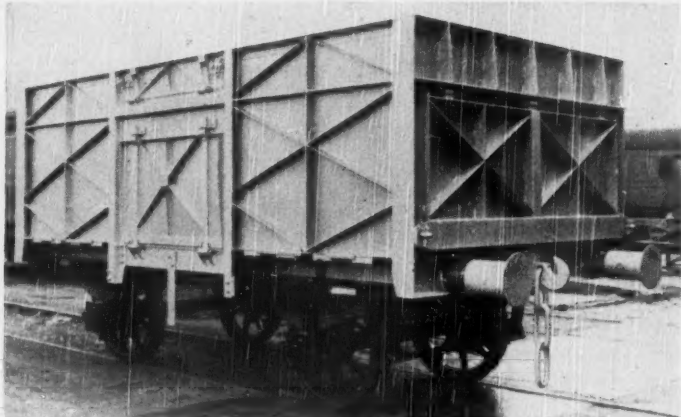
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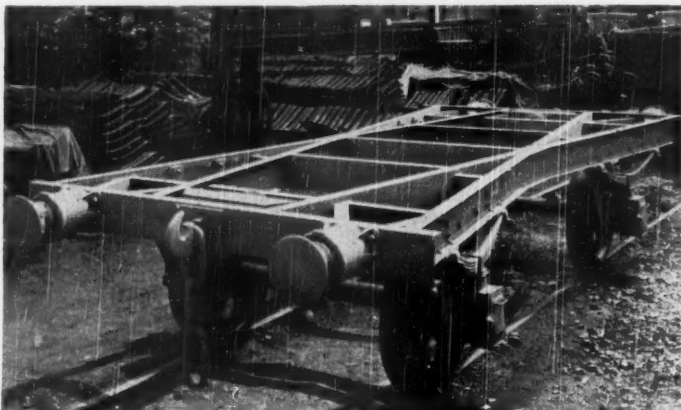
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STEAM ENGINE (Continued from page 71)



MINERAL WAGON (hopper car) weight was cut more than 2,500 lb. by building it with tension brake gear, special doors, sides, and end plates, and setting it on this . . .



TRIANGULATED UNDER-FRAME, which reduces the amount of steel used.

Research Cuts Engine Down Time

There comes a time in the life of almost any engineering industry when it reaches a fork and can go in more than one direction. Chances are that no matter which way it goes, engineers can make it work. The automobile today uses the liquid-cooled gasoline engine. It could have used an air-cooled powerplant or even a steam engine. Nobody knows for sure whether either of these would have been better or worse.

The railroad industry has just passed one of those crossroads—the choice between diesel-electric and steam power. In the U.S. diesel-electric power seems to have won out. Some manufacturers in the industry are working on the problem of improved steam engines, but no major American railroad has

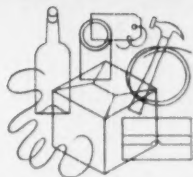
placed an order for a big steam locomotive in the last few years.

• **Another Story**—In Great Britain the situation is different. British railroads have decided to stick with steam power and make it pay off. If you want to know what might have happened if American engineers had stuck to steam, you can take a look at what the British are doing.

Britain's vote for steam is based largely on its geographic situation. Great Britain is only about 1/34 the size of the U.S., and its population per mile of railroad track is 2,226—compared to 500 for the U.S. Long hauls are rarely more than 250 or 300 miles, compared with 3,000-mile transcontinental runs here.

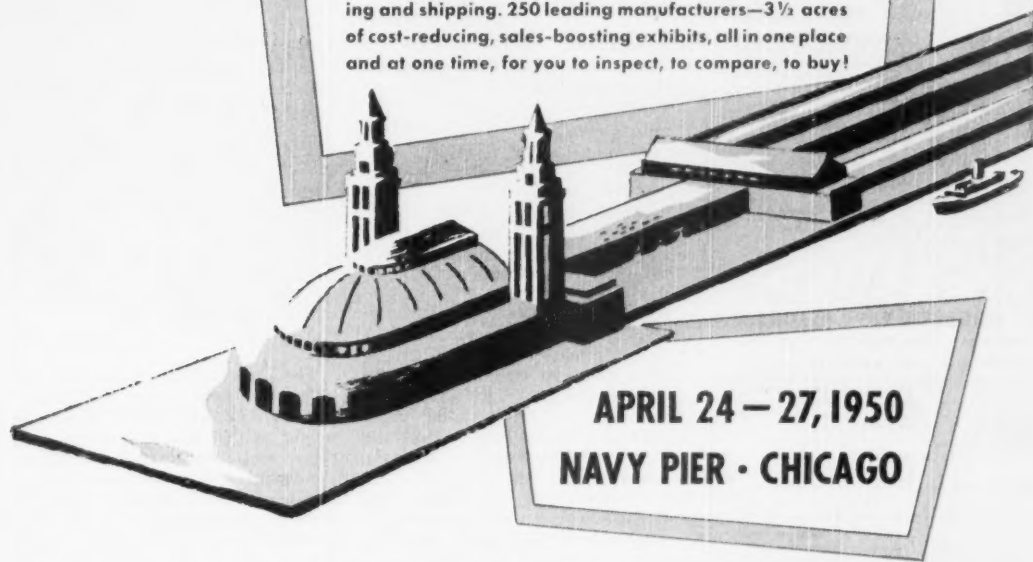
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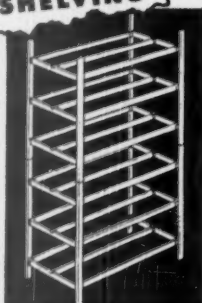
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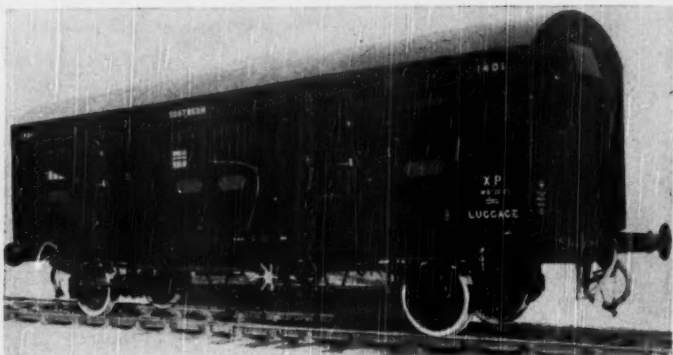
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LUGGAGE CAR has plastic sides, welded light steel framework. Outside panels are made of fabric-reinforced laminated plastic screwed to wood strips attached to the frame.

country (1) freight deliveries are expected the day after shipment; (2) passenger traffic must be frequent and fast; (3) commuter service must be adequate.

Diesel-electric locomotives cost several times as much as steam locomotives. But they are worth it to American railroads because of the economy resulting from round-the-clock availability, long continuous hauls, lower maintenance costs. The British just don't have hauls long enough to justify high original cost, so they have been improving manufacture, maintenance, and operation of the steam locomotive to give it economies comparable to diesel power.

• **On the Road**—This week, latest test units are riding the rails on shakedown trips. They include a new type of steam locomotive, cars made of lightweight materials such as laminated plastics, and cars using structural methods such as welding and brazing.

Britain's biggest problem is keeping locomotives out of repair shops—increasing availability. O. V. S. Bulleid, British railroad engineering consultant, put together for the American Society of Mechanical Engineers a lot of facts and figures on maintenance, construction, and operation problems of the British railroad industry.

Bulleid says that availability of locomotives is an even bigger problem than thermal efficiency. He doesn't think thermal efficiency should be forgotten completely, but he says it doesn't figure as a major part of operating costs. Bulleid puts it this way: Assume the total cost of operating one train-mile is five times the cost of the fuel. A 10% improvement in thermal efficiency, although it results in 10% fuel saving, only reduces total operating cost 2%.

But from the availability angle, substantial savings can be gained by small increases in the number of locomotives able and willing to work. In Britain,

a 1% reduction in the number of locomotives out of repair shops means 200 additional locomotives available for service.

• **Step by Step**—Increasing availability is basically an engineering problem. Locomotive improvement has come step by step. In the first step, the Q-1 design (picture, page 71), engine boiler capacity was increased so it would never have to be overloaded. Extra weight of the larger boiler was compensated by redesigning to remove unnecessary weight elsewhere. Welding was used extensively.

In a later design, called the "Merchant Navy" type, a triple-expansion system of three successively larger cylinders is used to provide added driving power. Pressure lubrication was tried on the middle cylinder and crank.

The boiler on this type has welded inner and outer fireboxes. This cuts maintenance. Inclosed linkages don't have to be checked more than once every 40,000 miles. But the linkages which are outside on the wheels and not under continuous lubrication showed wear and over-heating.

• **The Leader**—The newest British type, called the "Leader," looks like a diesel-electric. Two six-wheeled power truck-sets support the main frame. (Eventually extra trucks will be available in the shops as spares to run under the engine while the originals are under repair.)

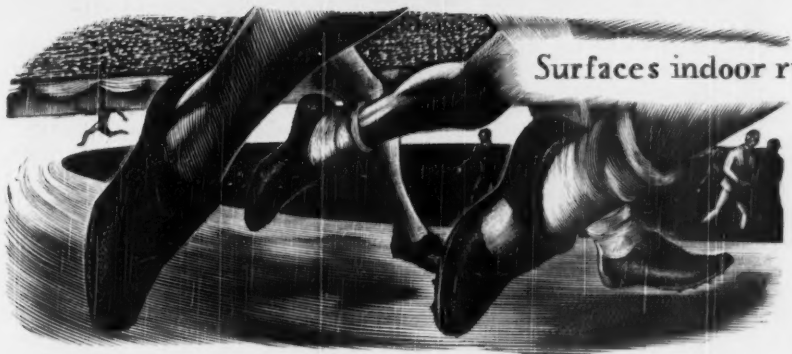
The Leader class is designed for multiple-unit operation. Idea: Reduce locomotives to a single type and adjust train weight to that size, to increase availability and reducing rolling stock requirements. When additional capacity is needed, operate engines as multiple units (as diesel-electrics are run here). Multiple units not only ease the problem of train makeup: they also take curves better, and total weight is distributed more efficiently for traction and braking.

The Leader's main frame is arc



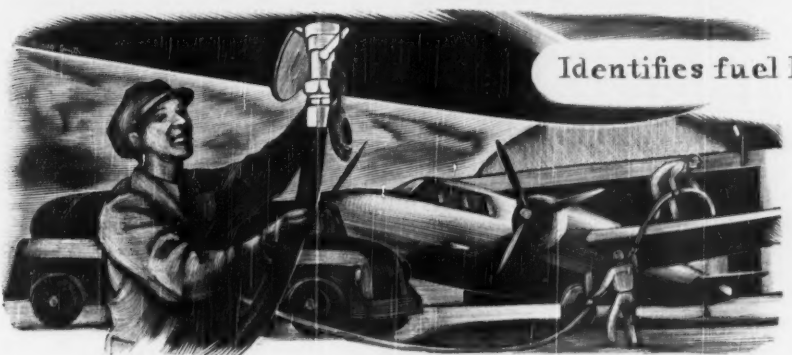
Protects finish during fabrication

Lithographed dial surfaces or other fragile finishes are easily protected with a coating of a new Armstrong's Adhesive. Sprayed coating adheres during stamping or debossing but peels off readily at final assembly point.



Surfaces indoor running track

A resilient and slipproof surface for indoor tracks can be made by loading an Armstrong's Adhesive with ground cork. This mixture may be troweled onto almost any type of understructure of wood, steel, or concrete.



Identifies fuel lines by color

Human errors in refueling modern military aircraft are now being minimized by color coding tank openings and fuel supply hoses with a pigmented Armstrong's Adhesive. When color on hose and fuel tank match, fuel is right for that plane.

These adhesives don't fasten anything

Strictly speaking, an adhesive that doesn't fasten anything is not an adhesive. It's a coating. But as we show above, some adhesives have special qualities that fit them to handle jobs that cannot be done as well by any other means. For example, one of Armstrong's Adhesives has more cohesion than adhesion; it dries into a "skin." Another holds heavy static loads for years, indoors or out. The third is so resistant to abrasion and aviation fuels that it can be used as a paint on fuel handling equipment.

There's a good chance that adhesives like these can do something for you, too, perhaps as a paint or a coating rather than as an adhesive. That chance, we think, is worth investigating. Write or phone Armstrong Cork Company, Industrial Adhesives Dept., 5002 Reservoir Street, Lancaster, Penna.

ARMSTRONG'S ADHESIVES

Made by the makers of
Armstrong's Linoleum



So—We Sold Them the Pilot Model of Our New FT (100% Functional) Fork Truck Which Had Been in Their Plant on Test

● Put yourself in our place. Our engineers had been instructed to design a new 3000 to 4000 lb. capacity electric fork truck—a completely functional “work horse”—retaining traditional Baker quality and ruggedness and adding features that contribute to greater utility, safety and convenience.

For months they worked like demons — analyzing basic materials, testing controls, motor characteristics, hydraulic equipment, studying every essential truck function, designing, re-designing, assembling, re-assembling.

Finally they said — “HERE IT IS!”

“Looks like a lot of truck,” said our management, “but how much will it cost?”

“LESS THAN ANY TRUCK IN ITS CLASS!” was the answer.

“Will it do the job?”

“LOOK AT THESE TEST RECORDS!”

Our engineers had subjected this truck to exhaustive tests covering every conceivable truck function. It had come through with flying colors.

BUT WE WANTED TO BE SURE!

So we selected a plant which had just about the toughest operating conditions you'll find anywhere . . . and put one of the pilot models on test there.

This plant is a high-production foundry. Abrasive dust, heavy, punishing loads, typical foundry floor conditions,

continuous, round-the-clock, three-shift operation—the most strenuous service you'll ever ask of a truck.

Frankly, no industrial truck had ever been able to “stand the gaff” in this foundry.

BUT THE BAKER FT DID!

From the day it was installed, there was **NOT ONE MINUTE OF DOWN TIME!**

As a result, the company insisted on keeping *this truck*; the pilot model which was in their plant on test!

That's the story of the development of the new Baker FT 3000 to 4000 lb. capacity Electric Fork Truck. Production models are now rolling off the assembly line in our new modern plant. Write us, or ask your nearest Baker representative to give you details on the toughest, lowest-priced, fork truck in its class.



Baker FT Fork Truck delivering rough castings to tumbling machine at the Taylor & Boggis Foundry.

THE BAKER INDUSTRIAL TRUCK DIVISION of The Baker-Raulang Co.

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Baker INDUSTRIAL TRUCKS

welded. To avoid the troubles that showed up in the Merchant Navy, the whole engine is inclosed, and moving parts are under continuous flood lubrication. Sleeve valves, liners, and pistons are pressure-lubricated, however. The same type of oil is used throughout the engine.

Other features: Boiler is welded; at some points chain drives replace rods coupling the axles, to distribute power more evenly; axles are supported on roller bearings.

● **Soft Water**—Both the Merchant Navy and the Leader use water-treatment to prevent pitting and failure of boiler parts. A system pioneered in France is being tried. Each engine carries its own water-softening plant; chemical impurities in the water are practically eliminated. The tender carries a small auxiliary tank of chemical solution.

The water problem is under the over-all supervision of a chief water-treatment engineer—nothing is left to chance.

So far, Bulleid reports, the water-treatment has freed boilers from scale and rust; engines now run 60 days instead of 10 days between boiler wash-outs; this increases availability 10%. It is expected that boilers will run 4 years before shop repair is needed.

● **Presteaming**—Besides the redesigning of their locomotives, British railroad men are improving availability by “pre-steaming” locomotives at depots. Having a number of locomotives always ready with steam up eliminates time lost getting up steam pressure.

● **Here to Stay**—Bulleid believes that steam traction is no dying duck, although the conventional Stephenson locomotive may be. Bulleid thinks steam traction can be made to compete on an equal basis with the diesel-electric for some types of service.

● **Rolling Stock**—But locomotives aren't getting all the attention. British engineers are also working with new materials and methods to cut weight of rolling stock. Four-wheel luggage vans (baggage cars) have been built of light steel, electrically welded. Outside panels are plastic reinforced with wire-and-cotton fabric; they weigh less than 12 oz. per sq. ft. Car bodies are independent of frames and can move longitudinally against spring cushions. That cuts down shock. Weight saving amounts to three tons per van (standard vans weigh 13 tons).

In saloon cars (Pullmans) one body shell design uses laminated plywood supported on a steel underframe. Well wagons (flatcars) made with a cast steel frame weighed a ton less than similar cars made of rolled steel sections riveted together. Coil and volute springs combined help guard against track irregularities and derailment.

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GENERAL MILLS uses Metal Detector to inspect packages and prevent stray metal from reaching the breakfast table.

Inspects 10,000 Food Packages for Only 1¢!

- ★ End contamination by metal
- ★ Prevent damage to machines

Whether stray metal is magnetic or non-magnetic, sitting on top, or buried deep, an Allis-Chalmers Metal Detector finds it . . . provides low cost, reliable protection.

The Metal Detector is placed on your conveyor or line. Metal in any material passing through the aperture of the detector flashes the electronic signal and sets a warning or rejection mechanism into action instantly.

HOW IT'S USED

Food and Candy Makers — detect metal in packages.

Pharmaceutical companies — keep metal out of cough drops, cotton batten.

Plastics companies — prevent stray metal from damaging calender rolls.

Record makers — protect record matrices.

Tobacco companies — protect making machines, shredder knives.

Feed companies — keep stray metal from entering grinder — reduce explosion hazard.

SPECIFICATIONS

SENSITIVE — Spots particles as small as .047 inches in diameter.

FLEXIBLE — Aperture heights: 2, 4, 7, 12 inches.

ECONOMICAL — Uses 110 volts. Draws only 140 watts. Costs but a few pennies per day for power.

FAST ACTING — Material may be conveyed through the aperture at speeds from 15 to 600 ipm.

EASY TO OPERATE — An Allis-Chalmers service man will assist in making installation and instructing operator how to tune and maintain the unit. No other training is needed.

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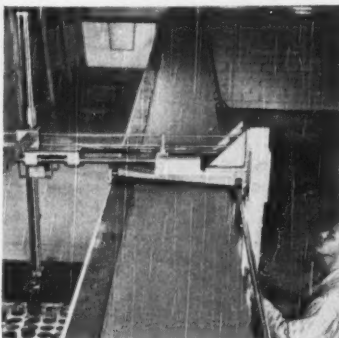
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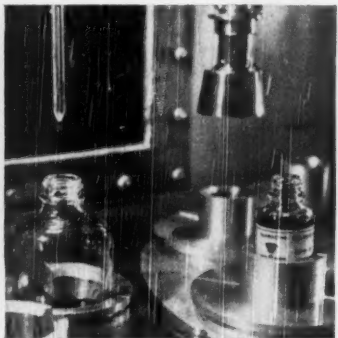
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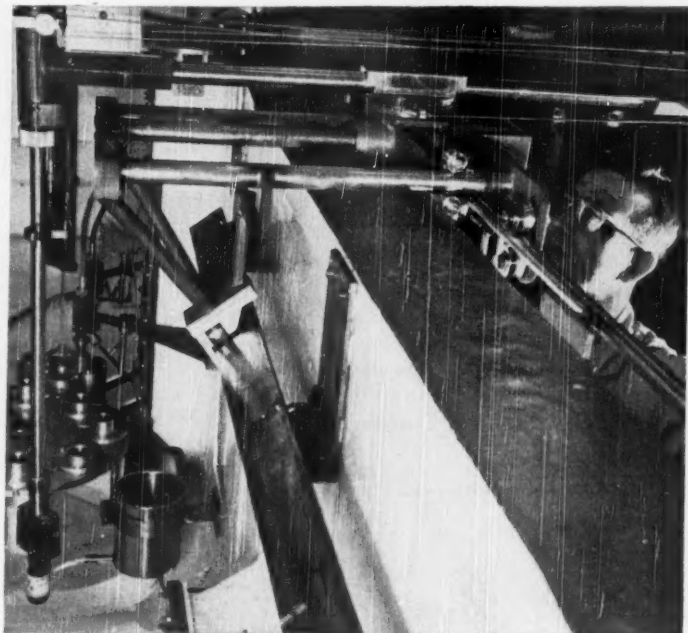
1 Four-man team gets "hot" material from atomic reactor at Oak Ridge. One worker pulls sample into protective lead tunnel. A second checks the material. Backstopper at his shoulder measures radioactivity, while the fourth man records the data.



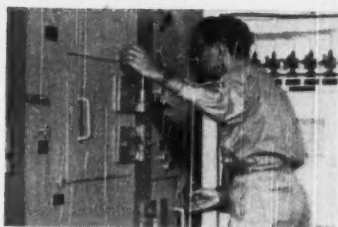
3 Heavy barricade protects worker as he removes hot material from storage. Bottle dangles from end of prongs.



4 Cylindrical holder decaps bottles on rotating table. Glass pipette transfers solutions from storage to shipping bottle.



5 Long-distance operator manipulates bottles with remote-control prongs. On the far side of the wall, prongs work like fingers to seal bottles tight. Then, still using prongs, worker moves the solution toward the barricade, where it gets a . . .



2 All done with mirrors. Operator peers through slit in concrete and lead walls, looks in glass to purify iodine 131 in hot cell.

Men in A-White

Down Oak Ridge way, the isotopes are moving. Nearly 10,000 shipments of radioactive material have gone out since August, 1946, to researchers in medical, biological, industrial, and agricultural fields.

To handle the big business, the Atomic Energy Commission has set up a new mechanized isotope-processing area at the Tennessee laboratory. Last week the press got a preview of its workings (pictures).

Behind thick walls, men in white did a lot of the job with mirrors. Ranga mechanical arms picked up the bottled hot stuff, readied it for shipping.



6 Radiation checkup. If it's O.K., it goes into the heavily leaded shipping container which is checked too.

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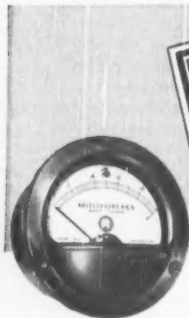
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Plywood Idea

New plant will specialize in low-grade plywood for industrial use. It figures on broad raw-material supply.

At Olympia, Wash., last week, **Hardel Plywood Co.** opened a new plant that has two unusual twists:

- The plant handles small logs of second-growth fir and hemlock. (Conventional plants don't use this low-grade stuff. For top-quality plywood, first-growth, knot-free Douglas fir is the principal raw material.)

- **Hardel** is specializing in plywood products for industrial and structural use. That way, it can market panels where strength counts but where blemishes and small knots do not affect the value of the plywood.

- **Short Lathe**—**Hardel's** lathe will peel logs only up to 6 ft. long (the standard for the industry is 8 ft.; some lathes are longer). But there's an advantage to **Hardel's** short lathe: It will handle some short, prime logs that top-quality plywood plants won't touch because they're under the standard 8-ft. length.

Another advantage: **Hardel's** lathe will peel logs down to 5½ in. in diameter. That's considerable recovery compared to other mills.

But with only a 6-ft. lathe, **Hardel** can produce panels only 6 ft. long. Since the industry standard is 8 ft., **Hardel's** market is limited to industrial and structural uses. Not that that's a narrow market. **Hardel's** 6-ft. panels can be used to make pallets, shipping containers, sheathing, and sub-flooring. Besides, for many uses, **Hardel** men say, the 8-ft. panel is unnecessary and wasteful.

- **Competitive**—The output of industrial grades runs about 12% of the total output of the Douglas fir plywood industry. And the price for industrial grades is about 20% under top grades. Since **Hardel** specializes in these industrial grades, it does not have to buy high-cost top-quality logs. So the company figures it will be able to produce industrial panels at competitive prices regardless of any jump in the prices of high-grade peeler logs.

The **Hardel** mill is small; its annual output is geared at 15-million sq. ft., only about 10% of the output in one of the biggest mills.

Hardel is managed by **Frank H. Morris**, formerly manager of **Springfield (Ore.) Plywood Co.**, when it was under **Weyerhaeuser Timber Co.** It sells through **Pacific Mutual Door Co.**, Tacoma, a plywood and door organization with experience in finding specialized markets for industrial plywood.



More people enjoy
Better television
because of **DPi High Vacuum**

SINCE receiving sets first went on the market, electronic engineers have clamored for television tubes with a brighter picture on the viewing screen and a longer life—and they have wanted them on an automatic mass production basis. To do this meant using a new, faster production-line technique and higher vacuum.

Higher vacuum, because air or other gases—even millions of times less dense than what we breathe—scatter and weaken the beam of electrons that draws the picture. Burning the filament brighter to compensate for the loss of useful electrons shortens tube life.

DPi engineers helped supply the answers. They designed

high vacuum equipment which eliminated costly, fussy, time-consuming pumping methods—replacing them with techniques that delivered vacuums 10 to 100 times higher and 10 times faster (shown above). Tube bottlenecks were eliminated. Costs came down. This new system was so successful that it is now used by nearly all manufacturers of television tubes.

Electronics is but one of many industries in which DPi high vacuum engineering is contributing improved methods. DPi also designs and builds high vacuum installations of plastic coaters, heat-treating ovens, dehydrators, and many other processing units. Inquiries are invited.

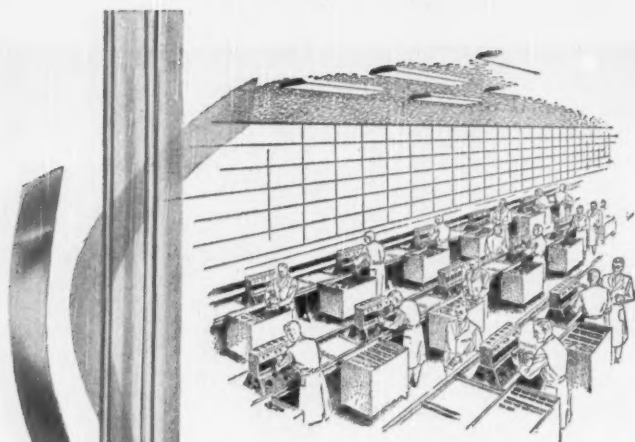
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A CENTURY OF CONFIDENCE



PRODUCTION BRIEFS

Radio and TV output is slated for a jump at Emerson. The company has just added 450,000 sq. ft. of production space by buying a Jersey City (N.J.) building from Continental Can.

Imperial Oil's cat-cracking unit at Winnipeg will be built by M. W. Kellogg's Canadian subsidiary. Daily capacity of the plant: 12,000 bbl.

A "floating" foundation is proposed for New Orleans' Veterans' Administration hospital. Supporting piles would be driven through sand base to bedrock.

Campbell Soup has given Massachusetts Institute of Technology \$1-million for research studies in biology and food technology.

Gray-iron castings were poured at the University of Alabama's new foundry for the first time last week. It's part of a program to train foundrymen for the state's industries.

Salvaging useful oil and wax from storage-tank settlements is a process developed by the U.S. Bureau of Mines. The bureau's pilot plant at El Dorado, Kan., gets 600 bbl. of clean oil out of 22,000 bbl. of waste.

U.S. Industrial Chemicals will patent synthesis of pyrethrin-like chemicals in foreign countries, license manufacture abroad.

A \$1-million expansion is planned by Ekco Products to set up four or five plants for applying its Glazon (silicone) coating to bakers' bread pans. Coatings of silicone (BW-Mar.29'47, p47) eliminate the need for daily greasings, save bakers 10% to 15%.

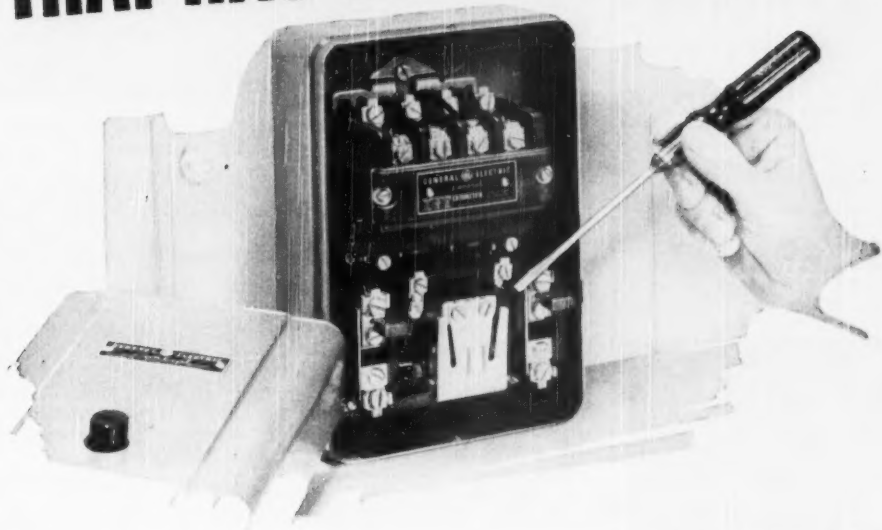
Oldsmobile hit its production target of 80 cars an hour after only nine weeks of operation at its Lansing (Mich.) final-assembly plant.

Distillation units on Navy ships are going to be cleaned with sodium acid sulphate from now on. Cleaning, which used to be a mechanical operation, will go on while the unit turns sea water into fresh water.

Big diesel: Power plant in production at Mirreles, Bickerton & Day, Ltd., Stockport, England, a 16-cylinder engine, develops 2,270 brake hp. at 900 rpm.

Battelle Institute has launched a new air pollution research program.

NOW-A MOTOR STARTER THAT HAS EVERYTHING



THIS IS GENERAL ELECTRIC'S new full-voltage magnetic motor starter—available in five sizes, for a-c motors up to 50 hp. It has *everything*—everything to give you long life and minimum maintenance. The complete line is of the vertical-life type—with fine-silver contacts that require no dressing. The "strongbox" coil is encased in plastic—to protect it against moisture and mechanical damage. Friction is reduced to a point that millions of operations are now possible with little or no maintenance.

IF LONG LIFE IS YOUR REQUIREMENT, install this new G-E starter on your toughest application. Watch it prove its all-round electrical and mechanical superiority.

IF YOU'RE MAINTENANCE-MINDED, pick up a screw driver. With *this one tool*, you can take the starter completely apart or put it together in two minutes—60 seconds after a little practice. You can inspect and change contact tips without touching the wiring.

Take a look, and you'll agree—these new G-E starters have everything! Bulletin GEA-5153 gives details; address Section A730-14 for a copy. Better yet, phone the nearest G-E Apparatus Sales Office or distributor and arrange for a demonstration. Apparatus Dept., General Electric Company, Schenectady 5, N. Y.

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GENERAL  **ELECTRIC**

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it's shorter

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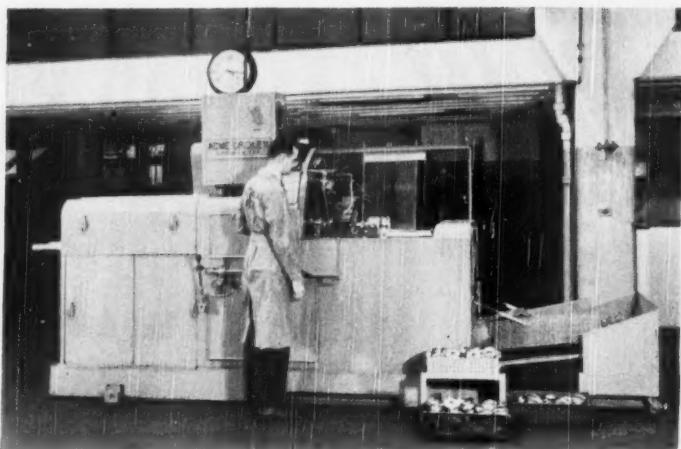
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* Indicate product here.

NEW PRODUCTS



Single-spindle machine, built by National Acme Co., has speed and automatic features of multiple-turret models, boosts output four to five times conventional machine's rate.

Machine Speeds Output, Cuts Cost

National Acme's new spindle machine, out next week, is faster, cheaper to operate than old ones, even pays off on short runs.

In the machine-tool industry, the spindle machine has developed from a single- to a multiple-turret tool. But there has always been a demand for a single-spindle machine that has the production speeds and automatic features of the multiple-turret job.

Next week National Acme Co., Cleveland, will introduce its Model M, a modern version of the original single-spindle machine.

The tool is designed to take carbide and high-speed steel tools at various working positions. The turret is put in position by an electrical circuit instead of the mechanical hand-crank used in conventional machines. Operating speeds are four to five times faster than conventional models. The new machine takes work ranging in size from 2½ in. to 5½ in.

A trial customer, using one of the company's regular models, was able to produce 7½ pieces per hour at top production speed. The new machine turns out the same piece at the rate of 72 an hour with a labor-cost saving of 34¢ per piece.

The usual schedule for building a machine tool was reversed in the production of Model M. Instead of building the machine and then offering it to industry, the company first made an engineering survey of what customers wanted in a single-spindle unit. Once the operating features were defined Na-

tional Acme built the answers into Model M.

Most automatic machines require long runs for profitable operation, but Model M was engineered for profitable runs on a few hundred pieces.

ENGINE POWER BOOSTER

There's one way to get more 'soup out of an automobile engine: Increase the octane rating of the air-gas mixture by injecting some kind of coolant.

During the war military pilots did this when they wanted an extra power boost. Since then the idea has had tryouts on passenger autos (BW-Oct. 30'48,p82) with injectors using alcohol, water, and tetraethyl lead.

Hydro-Power Injector Co., 1854 Lawrence St., Denver, Colo., has a water-vapor attachment that will perk up engines for power-conscious drivers.

The jar-like unit connects to the manifold of an engine through a hose. Water vapor from the jar feeds into the manifold through a diaphragm. When the engine begins to labor on a tough pull, suction from the manifold opens the diaphragm, allows the water vapor to mix with the air and gasoline. When the suction lessens, the diaphragm closes automatically.

As the water vaporizes, mineral impurities are left behind in the jar—so the unit works with ordinary tap

Four diesel-electric ferries, including the ultra-modern "Norfolk County" (foreground), all powered by Cooper-Bessemer; owned by Portsmouth-Norfolk County Ferries.

Another Example
of
Efficient Power
at Lower Cost



How a 5¢ ride at Norfolk can save dollars on the Mississippi!

EVEN today the ferryboat ride from Norfolk to Portsmouth, Va., costs only a nickel — just as it has for years past. For one thing, a progressive management has taken full advantage of modern diesel economy . . . and continues to show a profit at 5¢ a ride, despite multiplied costs for labor and other essentials.

The new, ultra-modern ferry shown above and another exactly like it are powered by Cooper-Bessemer diesels—picked because Cooper-Bessemer have shown remarkable stamina and exceptionally low-cost operation in two of the line's older ferries. The Cooper-Bessemer on the oldest boat have now served 20 years, 630,000 miles, with only two overhauls in all that time!

Power users in *all* fields can profit by the same features and qualities that help make this 5¢ ride possible.

So if your interest lies in cutting the power cost in

a Mississippi towboat, a locomotive, or in any other type of motive or stationary application, find out about the *new* things being done by one of America's *oldest* engine builders.

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GRAND COULEE'S PUMPS WILL OUTPERFORM NIAGARA FALLS*!



*NIAGARA AMERICAN FALLS	VS.	GRAND COULEE PUMPS
5½ MILLION gallons per minute		8½ MILLION gallons per minute
DROP . . . 160 Ft.		LIFT . . . 300 Ft.

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**Builds the Best
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Job!**

BJ Engineered these World's largest pumps...

TO MEASURE THE tremendous power of the pumps BJ engineered for Grand Coulee Dam, just picture the Niagara American Falls in reverse. Imagine all the millions of gallons of water that roar over these Falls every minute... add half again as much... and then reverse the flow, actually *lifting* this volume of

water twice as high as the Falls drops! That's the kind of record-smashing pumping power that BJ engineered for the World's largest dam.

NOTE TO ENGINEERS: These same basic BJ pump-building principles—proper job analysis, sound engineering, and quality construction—can be applied to your pumping needs, whether small or large, standard or special. Byron Jackson Co. engineers are ready to help. Write today, outlining your problems or send the coupon below.



An idea of the size of these BJ pumps is provided by this 14-foot section elbow. Six pumps are being built jointly with the Pelton Water Wheel Co., and six more are scheduled for later installation.

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Our job is pumping _____ in
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water. The company recommends cleaning the jar every three to six months. The injector comes in 2 sizes: a quart size for passenger autos, and a gallon jar for trucks and buses.

SELF-CLEANING OIL

Continental Oil Co. did 500,000 miles of auto driving to test Conoco Super Motor Oil, latest product of the Ponca City (Okla.) firm. In the testing, cars and trucks chalked up distances equal to five years' mileage for an average family car.

Additives in the oil were found to increase effectiveness against wear and assure longer engine life. Continental says. After 50,000 miles, wear averaged less than 0.001 in. on cylinders and crankshafts. Original factory machining marks still showed up on the engine parts.

The oil carries a detergent or cleaning agent that doubles its load-carrying capacity. The detergent keeps road dirt and other contaminations in suspension, doesn't let them build up on motor surfaces. When the oil is changed, dirt is removed with it.



STATIC-FREE BRUSH

Static electricity is the thing that makes camera lenses, photo negatives, or plastic sheets hard to clean. Wiping a surface with a cloth or brush causes friction and thus creates static. The static attracts dust and lint.

Omegatron, produced by RECO, 205 E. 43 St., New York 17, N.Y., is a cleaning brush equipped with a radioactive attachment that cuts out static, makes cleaning easier.

The static eliminator is mounted on the ferrule of the brush. A radioactive material inside the eliminator irradiates surrounding air, splits the air's mole-



He turns minutes into profits...

"time-engineering" is the secret!

THE success of most executives today may well be measured in minutes—the *profitable, productive minutes* they pack into every busy hour...for in business today time is the critical factor.

That's why Shaw-Walker has dedicated itself, for more than *fifty* years, to serving the "time-economy" of American business men—providing the tools to speed up planning, organization and office routine.

Note the executive's desk, above.

The smooth working top is only 29" from the floor—the new height of comfort and efficiency. Everything on the desk is within easy finger-tip reach—everything *in* the desk is prepositioned for fast, easy finding. It is "time-engineered" 27 ways throughout to eliminate clutter, confusion and wasted time.

And there are Shaw-Walker desks, chairs, files, fireproof cabinets, systems, indexes and supplies—4000 different items—each "time-engineered" to fill the needs of every job, increase the production of every worker.

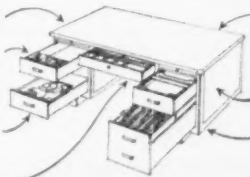
If you are setting up a new business or merely wish to modernize worn, outdated offices, be sure to use Shaw-Walker equipment throughout. It will help you make the *most of every minute, every working day!*

New, low, comfortable height (29"). Puts you on top of every job.

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Most comfortable working top ever invented.

"In," "Out," and "Hold" letter trays *inside*—confidential, quick, no desk top clutter.

Scientific personal file with speed guide, dividers—saves "barrels" of time.

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The booklet, "Time and Office Work," is packed with ideas for stretching office time. Organize now for greater sales effort and lower operating cost! A wealth of ideas on "time-engineered" office systems and equipment. 36 pages! Many color illustrations! Just off the press! Write today on business letterhead to: Shaw-Walker, Muskegon 21, Michigan.



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made with Du Pont Neoprene**

HOW LONG CAN YOU "BAKE" A BELT BEFORE IT BREAKS?

**Neoprene V-belts on fans in textile drying
over last 12 times as long as ordinary belts**

Life span of the belts on fans like this once averaged two weeks. For oil from bearings and oven temperatures up to 300 F. were more than any ordinary rubber belt could take. As a result, the frequent breakdowns caused a serious plant bottleneck . . . until the engineer tried V-belts made of Du Pont neoprene. Now he's getting at least six months' service from each belt . . . thanks to the superior heat and oil resistance of the chemical rubber made by Du Pont.

Just as a neoprene V-belt solved a problem for this textile processor, the superior qualities of neoprene made a better conveyor belt for use in a coke plant . . . longer-lasting rubber equip-

ment for oil field service. Every year, millions of pounds of neoprene are used to make products that give you better value—articles that resist oils, grease, and many chemicals; withstand exposure to direct sunlight, and have superior aging and flame-retarding properties.

So when you have a tough job for a resilient product to do—think of neoprene first. Ask your rubber goods manufacturer or tell us about your problem. While we do not make finished products of neoprene, we'll be glad to help you and assist you in finding a source of supply. Rubber Chemicals Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.

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cules into free ions. Static created by the brushing action is dissipated by the ions. Freed from static attraction, dust and lint are swept away by strokes of the camel's hair bristles.

A felt strip attached to the frame of the eliminator prevents scratching of the surface being cleaned. The life of the Alphontron element is about 15 months. Worn-out units are easily replaced. Standard widths of the brushes are 1, 3, and 6 in.

FASTER SHAVE

"Not fast enough" is the complaint of a lot of men who use electric shavers.

To speed 'em up, Electronic Specialty Co., 3456 Glendale Blvd., Los Angeles 39, Calif., has a small, plug-in unit called Shavex.

Most home shavers plug into outlets supplied with alternating current. Electric shavers rated for a.c.-d.c. operation run slower on a.c. Direct current runs a shaver much faster.

What Shavex does is convert the a.c. into d.c. The current is rectified by a selenium rectifier built into a small, plastic case. One end of Shavex plugs into a wall outlet, the other end has a built-in receptacle to accommodate a plug from a shaver cord.

The unit gives up to 80% more power and speed from an a.c.-d.c. shaver, the manufacturer says.

NEW PRODUCTS BRIEFS

Tire inner tube, developed by U.S. Rubber, has two plies of nylon cord. In case of puncture, the nylon squeezes the rubber around the hole, turns what would be a fast flat into slow leak. The tube is supposed to be stronger and safer than conventional tubes.

Odorless paint is now being made in 16 colors by Keystone Paint & Varnish Co., 71 Otsego St., Brooklyn. The company also makes an odorless black paint for tinting.

Small speed-changers that give gear reductions up to 750,000 to 1 are in production at Merton Instrument Co. Special units are made up by adding one or two changers to a standard three-section unit (ratios up to 3,375 to 1). The company address: 432 Lincoln St., Denver 9.

Fishing rods, marketed by Penrod Co., Inc., Gilbertville, Pa., are made of Superior Tube's beryllium-copper tubing. The rods, which won't corrode, are made in one- and two-section models, with varying degrees of flexibility.

BUILDING



APARTMENT projects in Houston have finally overtaken demand. The same thing is true in most other parts of the country. So now we have . . .

Apartments to Let—at Last

Country-wide survey shows surplus of high-rent units. Private construction will turn down in 1950. Tougher terms for FHA aid will discourage building, though mortgage money is still easy.

Apartment-house construction was one of the big elements in the 1949 housing boom. It will be just as big in 1950—but only because public building is coming up. Private construction of apartments is turning down.

That's the outlook, based on BUSINESS WEEK's check last week of builders, bankers, and real estate men across the country.

• **Bigger Place**—Apartment building since the war has been taking a bigger and bigger place in the total housing picture. In 1947, construction of multiple dwelling units accounted for only 11% of all housing starts. But in 1949, when housing starts hit an all-time high, privately financed apartments accounted for over 20% of the total.

If apartment building hit the skids now, it could pull the level of activity of the whole construction industry down with it. That's why any sign of a downtrend in apartment construction bears watching.

• **Still Up**—Not that you should expect to see a major slump this year. Washington's housing experts think that apartment building in 1950 may well top last year's record. They expect

public building to take up the slack as private building declines.

This year will see a big upsurge in public low-rent housing built by local housing authorities. Probably 100,000 of these government-subsidized units will go under construction before the end of 1950.

There will also be an extra dividend this year in military rental housing. So far, the Army has been given the green light for 11,590 units. It wants 15,000 units ultimately. And the Navy and Air Force are in the market for more rental housing, too. So total military rental housing starts this year may reach 30,000 units, mainly in multiple dwellings.

Even if the volume of private apartment construction takes a sharp drop this year, these two government programs could push total apartment construction over last year's record. Hence, the slump in private building may not make much difference to the building industry as a whole. But particular areas and individual contractors will feel it.

• **Double Trouble**—You can pin apartment builders' troubles on two points:

6 REASONS
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the New **LOW-COST**
ELECTRIC TRANSMISSION

OPERATOR'S CONTROL STATION

CONTROL UNIT

ADJUSTABLE-SPEED DRIVE MOTOR

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STARTS without clutches!

STOPS without mechanical brakes or clutches!

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LOW COST—a price anybody can afford!

The new low-cost Reliance V*S Drive (¼ to 2 hp.) performs all the functions of mechanical transmissions — electrically! Operating from A-c. circuits, it is the ideal choice for printing presses, paper winders and slitters, packaging machines, industrial food mixers, machine tools, conveyors and many other types of equipment. Write today for Bulletin D-2101 which gives further details.

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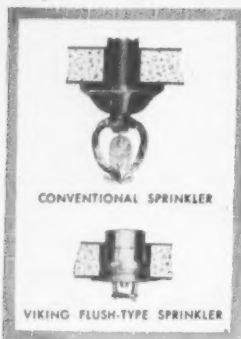
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• WRITE FOR BULLETIN BM20.
Address Dept. BW-250

The Bellows Co.
Akron, Ohio

One is legislation; the other is the market.

Section 608 of the National Housing Act is due to expire on Mar. 1. This wartime law authorizes the Federal Housing Administration to insure mortgages up to 90% of the estimated cost of a completed rental project. Under 608, skillful builders have been able to pare their final costs down as much as 10% below the FHA estimate. Thus, they could build an apartment without putting any of their own money into equity.

Now that the housing emergency seems to be over, Congress isn't inclined to extend Section 608. After Mar. 1, builders will have to fall back on an old section, 207, which 608 amended.

Section 207 authorizes FHA to insure mortgages up to only 80% of the value of an apartment property. Congress is expected to liberalize Section 207 this year by raising the insurance limits to 90% (BW-Jan. 14 '50, p. 21). But the fact that FHA estimates will be based on final value—not cost—of a property will discourage many marginal investors.

• **Effect**—Momentarily, the impending end of Section 608 has spurred building plans. A lot of builders are swarming into local FHA offices to get their applications in under the Mar. 1 wire. In Chicago, for instance, the FHA office is issuing commitments under Section 608 at the rate of seven or eight projects a day. Altogether, FHA is expected to have a stockpile of some 90,000 commitments under 608 by Mar. 1.

After the cutoff date, FHA expects an abrupt drop in applications. And in the meantime, just the fact that legislation on FHA guarantees is in flux is enough to make some builders keep their hands in their pockets this year. They don't want to put elaborate plans on the drawing boards until they know where they stand on FHA financing.

• **Economics**—But more important than the legislative shift is the effect of some plain economic facts on the trend of apartment construction. Supply is rapidly catching up with the market. In some areas—the West Coast particularly—it is running ahead of demand. This is especially true of the high-rent categories.

In Seattle, for instance, apartment building in 1950 may not be more than 20% of last year. The local FHA office there discourages projects with rentals over \$75 a month. It says that the market for \$80 to \$100 rentals is saturated. But builders claim that they cannot make an adequate profit on units that rent for \$75 and under. So they won't build.

In Los Angeles it's the same story. But there apartment builders are fac-

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so much noise!*

*Then put up a
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You'll be surprised how little it costs to reduce disturbing noise and increase productive efficiency. Let our acoustical engineers convince you with an estimate...

Thousands and thousands of "noise traps" to help end harmful noise—that's the secret of Fibretone®, one of several types of Johns-Manville Acoustical Ceilings.

Each 12"-square unit contains hundreds of small cylindrical holes drilled in the sound-absorbing material. As sound waves strike the ceiling, they enter the "noise traps" where the sound energy is dissipated.

Fibretone is pre-decorated, attractive in appearance, can be painted and re-painted, and is designed to meet the most modest budget. Available with coating of flame-proof paint if desired.

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You'll be under no obligation to let us answer two executive questions: "What will the job cost?" "How soon can you do it?" For a prompt estimate, or free book on "Sound Control," write today to Johns-Manville, Box 290, New York 16, N. Y. **Reg. U. S. Pat. Off.*



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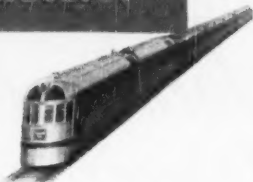
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ing additional competition from a boom in private home building. Long-term, easy-payment, mortgage plans on private homes are pulling tenants away from rental units. As a result, many apartments that were built last year are standing idle now. Some buildings have taken months to fill. And many non-rent-controlled units have had to cut rents 10% to get tenants.

Houston, too, has a surplus of high-rental units. Apartments renting for \$90 or over are hard hit. One local \$1-million project started out with a few \$175 rental units, but got no tenants. So it quietly reduced rates to \$115. And, as in Los Angeles, many ex-G.I.'s are buying their own homes for nothing down rather than pay high rents for apartments. The result is that though some 2,800 apartment units were built in Houston last year, only about 1,500 are planned for 1950.

• **Midwest**—The Far West isn't the only area that is scrapping plans. Detroit builders forecast a "considerable cutback in construction of apartments this year." Again, Detroit is overbuilt in the high-rent bracket; and builders say they can't make any return on their investment if they build to rent below \$75.

Cleveland has the same trouble. Last year 2,500 units were started; only 500 units are definitely planned for this year. Ads are still running in the local papers for \$96 apartments in a garden-type project that opened last year.

In Chicago, though, the picture is considerably brighter. The local FHA office has a big backlog of 1949 commitments under 608 on projects that will get under way this year. These alone should keep apartment construction humming through 1950. A sharp drop-off is expected in 1951. But by then a big public housing and slum-clearance program may take up the slack for Chicago's builders.

• **East**—In the East, both Philadelphia and Washington think that apartment building should hold up well this year. Rentals in Philadelphia are holding their own at monthly payments geared to \$30 a room. There's no attempt to concentrate on the lower-priced brackets. In fact the rent-per-room average last year was even lower than this year: \$26.

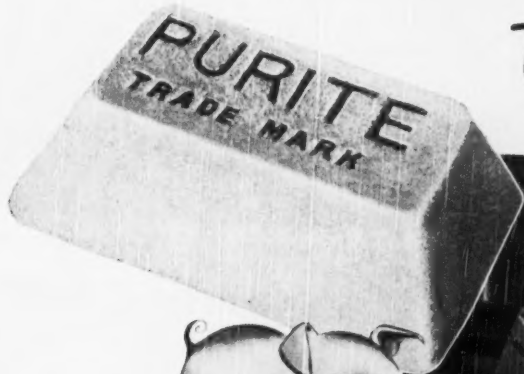
Washington, too, is still bullish about rents. The \$79 to \$89 two-bedroom units have prospects standing in line—even nine or 10 miles out of the city. And the \$105 units fill up—but after the paint has had a chance to dry.

• **Easy Money**—In all cities, East and West, mortgage money is cheap and available. With the loss of Section 608, though, lending agencies may tighten up their standards on the kind of projects they put their money into. The days of "anything goes" are over.

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Meadow Lands, Pa. plant of American Brake Shoe Co.

This little "pig"—a two-pound block of fused soda ash—is used for cleaning and otherwise improving cast iron. It is used as a flux that provides better melting, and as a desulphurizer and refining agent to remove sulphur and oxides which weaken and reduce machinability of iron. Known to the trade as Purite, these pigs have long been recognized as the most practical way to use soda ash in foundry processes.

Purite's development by Mathieson technicians is another indication how chemistry is helping

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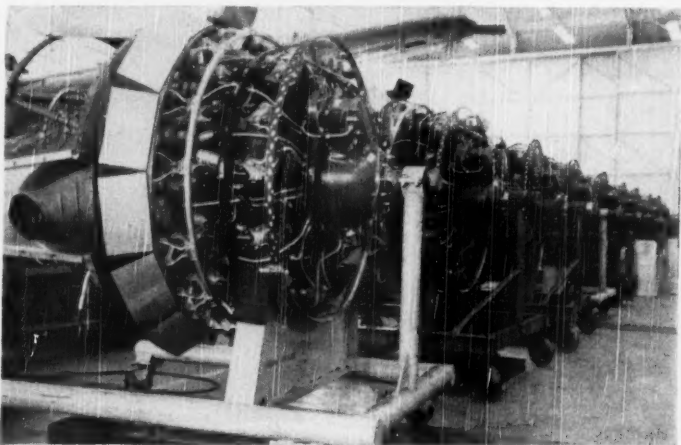
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Distributorships still open in certain areas

TRANSPORTATION



REPAIR BASE at Burbank is Lockheed's West Coast center for servicing transports.



ENGINE OVERHAUL is part of periodic reconditioning job for overseas carriers.

"Garage" for the Airlines

Worldwide expansion of air service has brought with it a new industry—the airplane "garage."

• **Economics**—Airlines are primarily interested in carrying passengers and freight. As such, their operations are geared to moving payloads. Maintenance and repair is a secondary concern, though a headache.

This is particularly true for foreign-flag airlines such as Air France, KLM (the Netherlands), and BOAC (Britain), which serve the American market. It's economically unsound for them to

buy, equip, and staff their own overhaul and repair bases overseas.

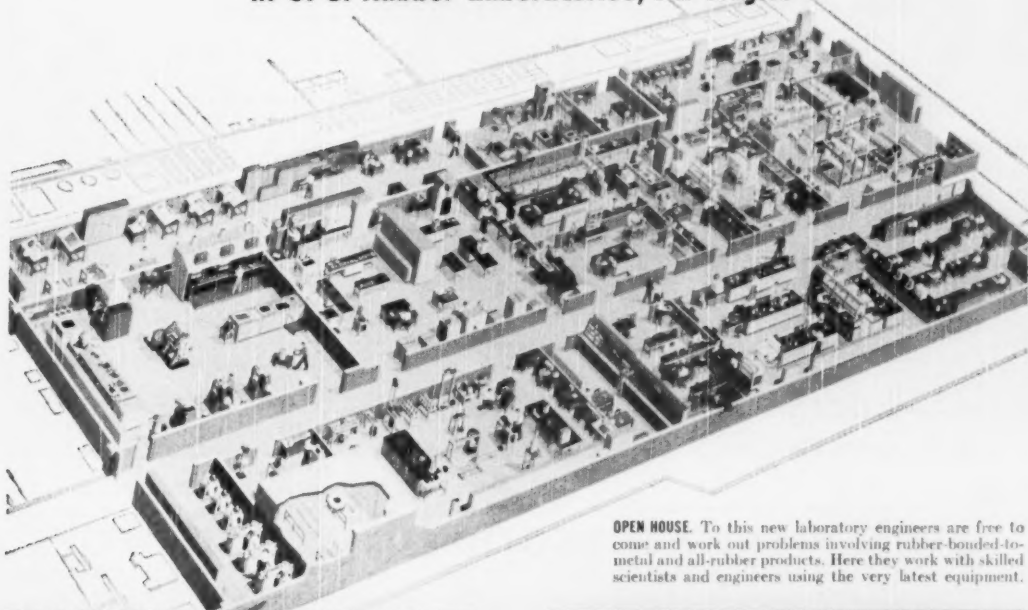
That's where the airplane "garage-man" comes in.

• **Three-Base Operator**—One of the biggest of these servicers is Lockheed Aircraft Service, Inc., a subsidiary of Lockheed Aircraft Corp. LAS has built up three large bases to service planes for the airlines.

One base is at Burbank. It has more than 1-million sq. ft. of space, with hangars, shops, offices, and paved areas. It's big enough to handle simultane-

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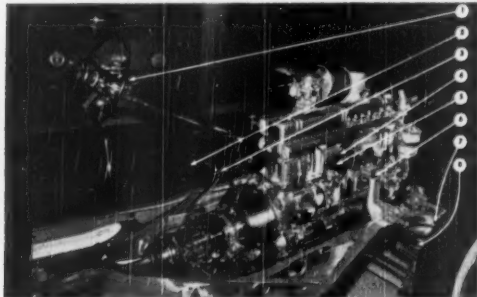
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ously six Constellations, four DC-6s, 12 DC-4s, 10 DC-3s, four Lodestars, and two Lockheed 12s.

MacArthur field base near Sayville, Long Island, N. Y., has 700,000 sq. ft. A smaller base, at Idlewild airport, will be enlarged soon; it services KLM, Air France, and BOAC aircraft.

• **Other Projects**—In addition, Boeing Airplane Co., Seattle, has an agreement with Lockheed for service and maintenance on Boeing Stratocruisers. Key men from Lockheed did a stint at the Boeing training school in Seattle for special instruction.

LAS also has a \$2-million contract involving heavy maintenance on Navy R5Ds (Navy equivalent of the C-54). Besides, it overhauls Marine Corps R5Ds, as well as some Military Air Transport Service C-54s.

These and other, lesser projects have brought LAS to a point where its payroll runs to more than 3,000 employees. The company's gross has jumped from \$15.7-million in 1948 to \$21.4-million (estimated) in 1949.

• **Consolidated Service**—Right now LAS is working on the idea of a consolidated maintenance service to cover all the airlines operating out of a particular field. Unlike other plans, LAS's scheme would be confined to service and maintenance "beyond the gate." The jobs of ticketing, reservations, and baggage processing would be handled separately by each airline.

• **Cost**—What does the aircraft garage-man charge the airline?

The cost is admittedly high. Skilled labor is needed throughout, and each change in equipment means the men who maintain the parts must go back to school. Even without radical changes refresher courses are mandatory.

Still when you reduce the cost to a per-mile basis, the billing isn't so far out of line.

Take "cycle reconditioning" as an example:

This program involves specific checks, overhaul, and repair work at 1000-hour, 2000-hour, 3000-hour intervals. Assuming an effective cruising speed of 200 mph, this means the ship has flown 200,000 mi. between checks. If the cost of a 1000-hour cycle reconditioning averages \$25,000, the per-mile cost is 12½¢. The airplane is valued, depending on type, at from \$350,000 to \$750,000.

• **Specialists**—Some smaller companies have made a paying specialty out of servicing the small, twin-engined planes owned by private corporations. The operation here is even more like that of the neighborhood garage. The owners may do some of their own servicing—such as switching tires and replacing fanbelts. But when it comes to a major overhaul, they head for the service racks.



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1 As "texts" for safe-driving courses, California high schools use a kit put together by General Petroleum. Included are a manual, various tests for vision, recovery, reaction.



2 Field of vision test measures how far driver sees to right and left. Developer of the tests included in the kit: Assn. of Casualty & Surety Companies.



3 Side-vision device uses moving buttons inside the case. By watching movement of the buttons, the potential driver finds out how wide her vision is.

Tests for Drivers—Ads for General

With 4,536,000 autos and trucks on its roads, California has the biggest highway population in the U. S. It also has the biggest accident toll—2,932 motor-vehicle deaths in 1948.

Last spring, as part of its running fight for safety, the state put through a law that added safe driving to its high-school curriculum. Now, before any student gets his diploma, he has to pull a passing grade in a state-supervised driving exam.

But the state left out one thing in its law: It failed to put up the money for instruction or testing equipment.

And that seemed like a natural cue for General Petroleum Corp., a Socony-Vacuum affiliate. General figured that sponsoring the tests would be an easy way to get its name before potential gas buyers—and, at the same time, give a lift to a worthy cause. The upshot was that General made up 157 kits, using tests developed by the Assn. of Casualty & Surety Companies, and turned them over to the California Department of Education. This year 150,000 high-school students will be put through their driving paces with the General equipment.

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FIRST NATIONAL'S Ben Wooten is bank's hope. Arch rival is his old boss . . .



REPUBLIC NATIONAL'S Fred Florence, who put Republic ahead in 1948.

Bankers Battle for Supremacy

The war's on for title of biggest bank of the Southwest. Right now, long-time holder, Dallas' First National, trails; Republic National is out front. But shift in top brass signals keener fight ahead.

Ben H. Wooten closed his desk at Republic National Bank in Dallas a few days ago and reached for his hat. But he didn't head for home. He walked across an 18-ft. alley into First National Bank next door—and into a big new job. From that moment, he took over as president of Republic's closest rival. The title at stake: the biggest bank in the Southwest.

For six years, Wooten, as Republic vice-president and member of the executive committee had helped his bank grow into its present leadership among southwestern banks. Now his job is to get First National out of a hole into which it has slipped in recent years.

In Dallas, the Southwest's financial center, banking competition is razor-edged. When First decided to call on some new and younger blood, it was the signal that it was bringing out the grindstone.

• **Lost Leader**—As Texas banks go, First is an old-timer. It's 75 years old. And for years it dominated the Dallas and southwestern banking picture.

Then some time ago, its grip on the deposits lead began to slip. The challenger was a brash newcomer: Republic National, which this month celebrated its 30th birthday. By the end of 1948, Republic, headed by President Fred

Florence, had taken over the No. 1 spot. It has shown no signs of climbing down off its pedestal.

• **Growing Faster**—Meanwhile, First National hasn't been standing still. But while it has been growing, its younger competitor has been growing faster.

First's most interested critics—its stockholders—have watched the goings on with an eagle eye. Their morale, none too high, slipped another notch recently, when they learned that Republic had captured another first: It's the biggest bank in the whole South, taking over from New Orleans' Whitney National Bank.

• **Deposits**—When you come right down to it, Republic doesn't hold much of a lead over First. At the 1949 year-end, Republic's deposits—\$339,870,846—were only some 2.2%, or \$7.3-million, larger.

But it's the trend that has First National's stockholders and top brass worried (table, page 102). A year earlier, Republic's lead was only some 1 of 1%. As recently as 1947, First had been out ahead by some \$18.4-million, or almost 7%.

Republic's recent gains have been steadily improving its national banking position, too. Ten years ago it ranked only 87th largest in the nation

on its deposits showing; by 1948 it had climbed to 57th place; now only 49 other U.S. banks hold more deposits.

First's deposits record is much less impressive. It stood 60th among domestic banks in 1939; 58th in 1948, and only 52nd when 1949 ended.

• **Capital Funds**—The capital funds picture is even more lopsided. To expand on this score, First has lately relied more on retained earnings than on "new money." Republic has adopted different tactics. Six times since 1941 it has sold new shares to stockholders. As a result, it has left First far behind.

So now Republic can boast of some \$30-million of capital, surplus, and undivided profits. That's about \$1 of capital funds for each \$11 of deposits, a showing far above average. First's capital funds come to \$21,285,773; its capital funds-deposits ratio is 1-to-16.

• **Job and the Man**—That's the picture as Wooten takes over. Those in control of First have long felt that he is the man to put their bank on top again. They have been trying to get him for over a year. But he wanted more authority than they were willing to grant at first. He didn't join up till he got what he wanted: the presidency, and a free hand.

How he'll make out is anybody's guess, of course. But at least Wooten has no illusions about the size of his job. "In Dallas," he points out, "banking has reached new heights of competitiveness. No bank is merely defending its goal line. They are all out there carrying the ball—merchandising, selling credit, selling thrift, selling service, selling friendliness."

• **Everyone's Race**—And he's right. To maintain Dallas (and themselves) as a financial center, its banks keep their best salesmen—usually vice-presidents—walking the streets. They solicit new business, go after each other's accounts, pass up no opportunities. And they don't stop at Dallas. They have equally good salesmen combing eastern and northern cities for business, particularly from industries moving their way.

Neither do they stop at banking. All have public-relations departments that work hard getting hotel rooms, football, concert, and opera tickets, and the like, for clients and potential customers. Their officers compete with each other for top posts in civic activities. And they're constantly trying to grab off their competitors' most productive new-business getters.

Hoopla promotions designed to pull in new accounts are another part of the local competitive picture. Two years ago the Mercantile National Bank put on a spectacular campaign. Aimed at adding \$10-million to deposits, it produced \$14.5-million of new accounts. Republic has since countered with a drive of its own. Its target was



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Republic National vs. First National

Dec. 31,	*Deposits				*Capital Funds			
	Republic National	First National	Republic	% Lead First	Republic National	First National	Republic	% Lead First
1929....	\$52,204	\$79,937	...	53.1%	\$6,500	\$14,789	...	127.5%
1932....	39,967	66,698	...	66.9	6,000	14,000	...	133.3
1939....	89,216	128,981	...	44.6	8,451	14,821	...	75.4
1940....	92,414	137,343	...	48.6	8,902	15,124	...	69.9
1941....	113,320	168,716	...	49.0	10,337	15,326	...	48.3
1942....	152,157	210,328	...	38.2	10,601	15,606	...	47.2
1943....	172,438	238,405	...	38.3	11,051	16,038	...	45.1
1944....	221,136	291,522	...	31.8	13,553	16,550	...	22.1
1945....	305,172	355,233	...	16.4	21,348	19,887	7.3	...
1946....	244,886	290,129	...	18.5	22,151	20,258	6.7	...
1947....	281,295	299,671	...	6.5	22,804	20,653	10.4	...
1948....	311,745	309,688	0.7	...	27,011	21,362	26.4	...
1949....	339,871	332,573	2.2	...	**30,000	21,286	40.9	...

*In thousands of dollars.

**Jan. 10, 1950, after sale of new stock.

\$15-million, it netted over \$20-million.

• **Friends**—Probably Wooten's biggest job is to make First a warmer bank. Even some of its best friends agree that it has lacked friendliness, that there is some of the traditional bank chill in its relations with patrons. But Dallasites are willing to bet that Wooten will change this if he does nothing else. Observers say that the frost on First's banking floor is already thawing.

In promoting friendliness, Wooten is just doing what comes naturally. Wooten is a genuine "small-town boy." Now in his mid-fifties, he was born and raised in rural Texas, went to one of its small colleges (North Texas State). After World War I overseas service, he started his career as assistant cashier of a bank in Alba, a town that still hasn't more than 500 or so residents.

He has kept the small-town friendliness of those earlier years. In the next quarter-century he became a state bank examiner; chief state examiner; chief examiner for the Federal Loan Bank system; and he served 12 years as president of the Federal Home Loan Bank of Little Rock, Ark. But he never permitted his rise into big-time banking to turn him into a stuffed shirt.

Wooten joined Republic in 1944. He was a key figure in the drive that finally took Republic to the top of the heap. Meanwhile, he became prominent in Dallas community affairs. He was drafted to head the local Seventh War Loan drive in 1945, to run the Community Chest campaign last year. He's a Baylor University trustee, chairman of his alma mater's board of regents, director of many Dallas non-business enterprises.

So from all angles he looks well equipped to make First a friendly bank—and at the same time to pull all the competitive merchandising tricks

needed to return it to its former glory.

• **Republic's Guns**—Nevertheless, Dallasites look for a warm race. "Don't sell Fred Florence short," they warn. Despite all the help Wooten gave him, Florence is the man primarily responsible for Republic's present supremacy.

Florence, a native New Yorker brought to Texas in 1892 when he was a year old, says that Republic won its present lead by "initiative"—by being willing to step out in front and break with traditions to explore new, yet sound, fields of lending.

It was one of the first local banks to extend loans on proven oil and natural-gas production. It was a leader in extending credit (once an eastern role) on commodities, especially cotton. First is doing a lot in both these lines, but Republic is the leader.

Republic has done a big job in foreign banking, too, particularly in Latin America. But the Southwest is Florence's main love. And that's where he has channeled his bank's main business. To him a banker's business sums up this way: short-term liquid loans, a fast turnover, and the best diversification possible. Those three bases serve both the bank and its area best, he says. And so far, Republic's record—and Dallas'—bear him out.

• **Payoff**—According to Florence, it is no longer cheaper to get money in the East than in Texas; local borrowers don't have to go out of the state for loans. The banking business in the Southwest has grown up, he says.

Some recent data turned up by an unprejudiced authority confirm him. According to The American Banker, there are now only two states (New York and Ohio) that have more representatives among the nation's 300 largest banks than Texas has. In 1939 there were five (California, New Jersey, Pennsylvania, New York, and Ohio).

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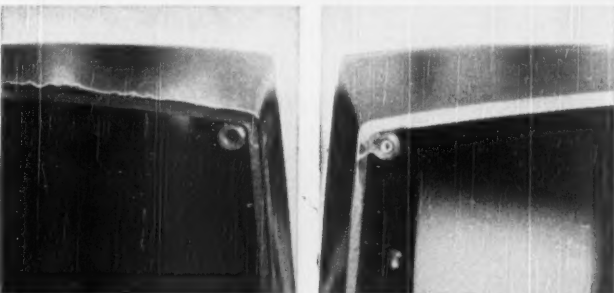
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SEC Reaches for More Stocks

Sparked by SEC, backed by securities dealers and exchanges, Frear bill would require registration for many issues exempted so far. Washington figures passage chances are good.

Congress is going to broaden the securities laws this year.

It is almost certainly going to pass the Frear bill, and that will force some 1,800 corporations—now exempt—to register with the Securities & Exchange Commission.

Among the firms that would be affected by the change are such giants as Alcoa and A&P.

• **Till Now**—As the law stands now, registration with SEC is required only for security issues (1) that are listed on a national exchange or (2) that were floated publicly after 1936.

This means that securities issued prior to 1936, and never listed, do not have to conform to the commission's regulations. Some of these issues are large, widely distributed, and heavily traded over-the-counter.

• **SEC's Cure**—So the securities commission thinks they ought to be required to register.

SEC got Sen. J. Allen Frear (D., Del) to introduce a bill that would end these exemptions. Frear's bill would require registration of all companies with assets of at least \$3-million and at least 300 security-holders.

Specifically, the bill would force the larger companies of the unlisted group to:

• Disclose pertinent financial information in periodical reports.

• Submit proxy solicitations in advance for SEC approval. This would also involve publishing officers' salaries in excess of \$25,000 and stockholdings of directors.

• Report all trading by insiders. Under SEC rules, officers and directors are not permitted to benefit from short-term trading in their own company's shares. Profits which result from such transactions must be turned over to the company.

Though SEC is still the prime mover behind these proposed changes, the Frear bill has backers in the securities business, too. The big exchanges are for it. So are the Investment Bankers Assn. and the National Assn. of Securities Dealers (over the counter dealers). They agree that all corporations should be on the same footing.

• **Four Strings**—These associations, however, have tied their endorsements to four amendments to the bill as it was introduced. Their principal suggestion: End the power of the exchanges to grant unlisted trading privileges. With unlisted trading privileges, deal-

ers can use the facilities of an exchange to trade in stocks that have not complied with the listing requirements. What this amounts to is waiving the regular listing requirements for that particular stock.

Most NASD members deal in both listed and unlisted securities on an over-the-counter basis. So it makes little difference to them if one of the 1,800 companies—having gone through the trouble and expense of registering—decides to list its securities.

But they regard the unlisted trading privilege as an unhealthy hybrid. They feel that it freezes them out, because most of them can't trade on the exchanges that permit it.

The other three amendments the associations want would:

(1) Give the Federal Reserve Board authority to make over-the-counter securities eligible for trading on margin.

(2) Authorize SEC to make a study that will produce standards for listing and delisting. Exchanges now set their own standards.

(3) Clearly state that dealers who are officers or directors of investment companies may deal in shares of those companies in the ordinary course of their business without being subject to insider-trading rules.

• **More Strings**—SEC in accepting these amendments has eliminated much opposition to the Frear bill. There is still some left, however.

Some brokers who deal in over-the-counter securities exclusively have told the Senate Banking & Currency Committee that passage of the bill would mean loss of a lot of their business to exchange members.

But most of the opposition comes from companies which would be forced to register. They are getting support from several organizations including the National Assn. of Manufacturers and New York's Commerce & Industry Assn. Their arguments run along these lines:

• Registration costs small outfits relatively more than it does big ones.

• Publication of individual salaries would be damaging in smaller communities, to smaller companies.

• Those in really competitive lines might be seriously handicapped if forced to reveal the breakdowns of inventories to their competitors and customers.

• Quarterly reports in seasonal trades are valueless.

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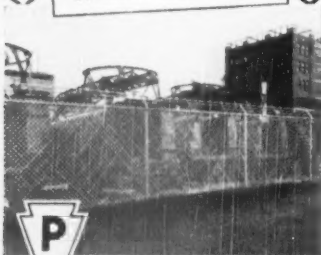
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It's Up to the Government

Plane makers' prospects for 1950 depend mostly on how much money their No. 1 customer—the U. S. government—decides to spend. Airline buying also is a factor.

Wall Street is warming up to the aircraft manufacturing industry again. And this isn't another attack of bedazzled wonder at the miracle of flight. Although few aircraft companies have reported complete 1949 earnings yet, it looks as if last year was their best so far since the war (table, page 109). What's more, business is expected to be better in 1950, as scheduled deliveries of military aircraft are stepped up.

Some Streeters even talk about the possibility that the cutbacks in military-plane spending which President Truman made last year may not stick. They think that international tension over Indo-China might lead Congress to override the President.

Observers closer to Washington are doubtful about this, but they think that Congress may force Truman to put through all future national defense appropriations instead of holding back on some.

• **Good Prospects**—So it doesn't seem too rash to expect that: (1) Present dividend rates will be maintained in the months ahead. (2) Some companies which had to pass dividends last year may even be able to start payments again in 1950.

That helps explain why Standard & Poor's index of aircraft manufacturing stocks has been moving upward. Last week it went to 126.4—the highest point it has reached since July, 1948, when Congress had just voted for a 70-group air force. That's about 27% above the aircraft index's 1949 low, a better-than-average gain compared with the rest of the market (page 113).

• **Ups and Downs**—Plane-maker stocks have had their ups and downs. Early in 1946 Standard & Poor's index stood higher than it had all through the years after 1939. It was then well above the composite industrial stock index. Reason: Aircraft companies were in excellent financial position, with lots of retained war earnings. And there was plenty of public optimism about the possibilities of mass-producing private planes and making big sales to airlines.

But costs were rising, initial expenses of developing new models were heavy, and sales were way off. It became obvious that the big civilian market for aircraft was not going to arrive. So plane-maker stocks started falling several months before the market generally turned down.

Only four plane makers managed to show a profit from operations in 1946

—Grumman Aircraft Engineering Corp., Fairchild Engine & Aircraft Corp., Glenn L. Martin Co., and North American Aviation, Inc.

It was the same story in 1947. And besides, some companies were also taking losses from experiments with non-aircraft lines. So the aircraft stock group dropped a lot lower than industrials as a whole. But by May, 1947, it had reached its postwar low point. At about the same time, the cold war began convincing some investors that the industry might have a postwar future after all.

• **Follow Government Buying**—Since then aircraft stocks have pretty much fluctuated with prospects of sales to the major customer, the U. S. government—though airline orders haven't gone completely unnoticed. Here's how prospects line up right now:

Plane makers expect to deliver about 31-million airframe lb. in calendar 1950. That isn't so much as they had planned, but Truman's cutback order changed their schedules. In calendar 1949, they delivered somewhere between 2,400 and 2,700 planes, about 28-million airframe lb.

Contracts for the fiscal year ending June 30, 1950, will total \$1.9-billion. This will buy about 2,000 planes, airframe weight 30.4-million lb. President Truman has requested Congress to approve a \$2-billion military-plane budget for fiscal 1951. That would include the \$851-million Truman held out of the fiscal 1950 budget.

• **Carryover**—Delays in spending authorized funds will probably spread sales over the next few years. Most planes to be delivered this year are being built under contracts signed in previous years. And many of the planes that will be ordered under next year's budget won't be delivered until fiscal 1952 or later.

Sales prospects for transport planes are a lot harder to figure. U. S. plane makers had unfilled orders for 84 civilian transports at the end of November, 1949, compared with 161 at the end of 1948. About 151 transports were delivered in 1949, compared with 263 in 1948. More orders are on the way. It's reported that Eastern Airlines, Inc., and Transcontinental & Western Air, Inc., are in the market for 70 new ships. They are negotiating with Martin.

Here's what conservative Wall Street aircraft analysts think of some leading plane makers:

Bell Aircraft Corp. has been working



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on guided missiles, experimental supersonic planes, and helicopters. It also makes commercial helicopters, sub-contracts for the aircraft and automotive industries, makes motorized wheelbarrows (BW-Jan.10'48,p39), and through a subsidiary makes valves and fittings. In spite of a four-month strike, Bell's 1949 earnings probably beat 1948.

Boeing Airplane Co. is a major builder of heavy bombers and transports. Wall Street figures it may have earned \$3.50 a share in 1949, compared with \$1.58 in 1948.

Consolidated Vultee Aircraft Corp.

makes military planes and commercial transports. Nine-months earnings indicate that it was well out of the red in 1949, and may have earned around \$1.50 per share in the full year.

Curtiss-Wright Corp. isn't making any military planes now, but does make a lot of military engines and propellers. Earnings last year were probably very small. Few Streeters expect C-W to pass on any big part of its retained wartime earnings (BW-Apr.16'49,p96) to stockholders this year.

Douglas Aircraft Co., Inc., a major builder of military planes and airline

Peering into Plane Makers' Pockets

	1939	1944	1948	1949
	(Figures in Thousands of Dollars)			
Bell Aircraft				
Gross income	\$450	\$317,474	\$15,329	\$8,035*
Income taxes	2	11,146		
Net income	9	3,157	1,347	49*
Working capital	1,276	9,903	9,779	10,062*
Earned surplus	124	7,155	6,786	11,035*
Boeing Airplane Co.				
Gross income	11,847	608,082	126,931	176,514*
Income taxes		27,815	1,185	1,100*
Net income	13,284	5,258	1,716	1,780*
Working capital	1,500	27,533	37,811	
Earned surplus	1,678	30,107	30,520	
Consolidated Vultee				
Gross income		960,017	112,351	
Income taxes		53,867		
Net income		12,424	111,979	2,698**
Working capital		39,679	13,188	
Earned surplus		28,144	5,750	
Curtiss Wright Corp.				
Gross income	48,654	1,716,935	111,737	87,822*
Income taxes	1,456	79,480	4,031	
Net income	5,218	14,331	5,313	1,954**
Working capital	8,772	73,426	92,987	
Earned surplus	6,635	42,231	87,618	
Douglas Aircraft				
Gross income	27,900	1,061,407	118,582	87,994**
Income taxes		26,900	5,264	4,220**
Net income	2,880	7,685	5,829	5,153**
Working capital	9,066	49,674	56,609	59,077**
Earned surplus	7,818	57,446	63,270	44,517**
Grumman Aircraft				
Gross income	4,482	323,749	41,032	14,640††
Income taxes	212	24,109	1,780	975††
Net income	892	4,945	2,393	1,458††
Working capital	1,830	9,535	20,095	
Earned surplus	747	9,155	20,867	
Lockheed Aircraft				
Gross income	35,308	602,482	125,621	55,785††
Income taxes	874	13,887	2,759	854††
Net income	3,133	4,523	6,239	2,237††
Working capital	2,888	23,783	29,510	29,420††
Earned surplus	3,005	40,528	31,429	32,590††
Glenn L. Martin				
Gross income	24,169	500,445	72,687	34,138*
Income taxes	987	25,235		
Net income	4,111	4,910	1,711	1,592*
Working capital	8,315	17,694	10,109	
Earned surplus	16,859	41,755	3,283	
United Aircraft				
Gross income	52,082	743,797	207,957	162,036*
Income taxes	1,890	46,873	4,568	3,361*
Net income	9,375	15,562	10,494	6,549*
Working capital	18,667	94,000	84,802	
Earned surplus	8,455	62,521	67,305	

* Nine months ending Sept. 30. ** Nine months ended Aug. 31. † Before possible tax carry-back credit. †† Six months ending June 30. ‡ Deficit.

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CLASS A STOCK

A dividend of 25 cents per share, payable March 1, 1950 to stockholders of record February 15, 1950.

COMMON STOCK

A dividend of 25 cents per share, payable March 15, 1950 to stockholders of record February 28, 1950.

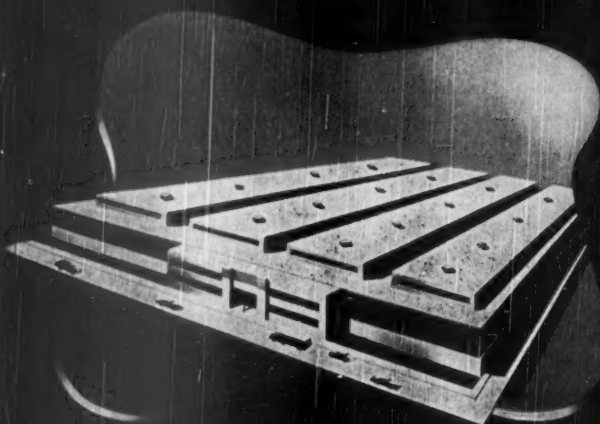
R. A. O'CONNOR
President

February 8, 1950



"See Clues section on page 132"

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transports, may have earned \$12.50 in 1949, compared with \$9.72 in 1948. The company has retained a large chunk of wartime earnings.

Grumman had a \$135-million backlog at yearend, recently received a Navy order for 314 jet fighters and attack planes. The Street estimates 1949 earnings came to around \$3.25.

Lockheed Aircraft Corp. has a sizable backlog of Constellation orders besides military orders. Earnings are figured at around \$4.50 for 1949.

Martin isn't doing so well on military orders as some of the others. It still owes a lot of money on an RFC loan, and it can't pay dividends until that is repaid.

United Aircraft Corp. has a good-sized military backlog and a good cash position. Earnings for 1949 are estimated around \$3.00.

FINANCE BRIEFS

Biggest bond issue ever sold at competitive bidding—Pennsylvania's \$376-million of bonus bonds—went to a syndicate of 400 banks and investment houses. Chase National, National City, Bankers Trust, First Boston Corp., and Drexel & Co. headed the group. Public reoffering was a big success.

Jersey Turnpike bonds will go to institutional investors only. A group of 53 has agreed to underwrite the entire \$220-million issue.

Construction outlays for electric power and light companies came to \$2.2-billion last year, up 7% from 1948. Bonds supplied 39% of the money, sales of preferred 15%, common 10%.

Holdings of governments were one of the big reasons Mutual Life Insurance of New York failed to fatten its net yield much last year (it made 2.82% on assets against 2.74% in 1948). Despite a cut of 16% in governments, the bonds still made up 23% of all assets.

Profits doubled for Admiral Corp. last year, the company now figures. It thinks net will come to about \$8-million on sales of \$112-million.

Philadelphia's tax on corporate income and earnings from investments (BW—Dec. 17 '49, p. 76) was ruled illegal by the state's supreme court. The new wage tax, though, still stands.

Real-estate buying by life insurance companies hit \$398-million last year. Biggest purchases: \$151-million for commercial rental properties, \$65-million for rental housing.

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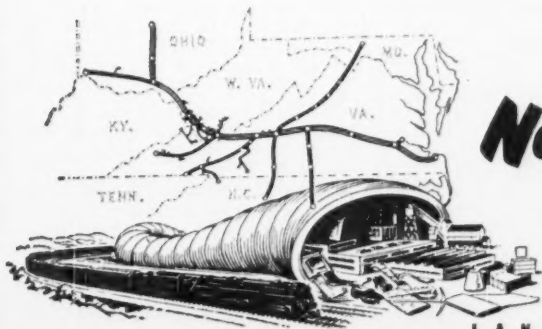
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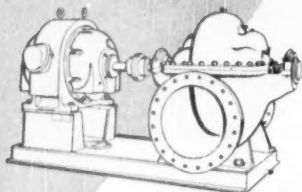




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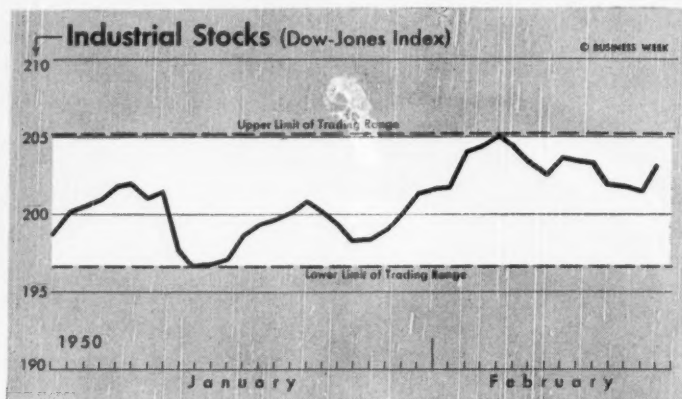


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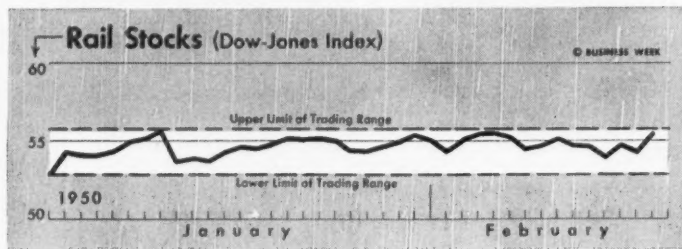
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THE MARKETS



INDUSTRIALS have moved sideways since the start of the year . . .



RAILS have also moved in a narrow band, so . . .

Market Makes a Line

When both the industrial and rail averages move within a range of about 5% for several weeks, Dow theorists say that the market is "making a line." That's what the new bull market has been doing since the beginning of the year (chart).

This sideways motion is supposed to indicate that either (1) the smart people are quietly buying, or (2) they are quietly selling. Since there are two sides to every trade, you can't tell the

smart from the dumb until the breakout comes. When it happens, according to the Dow theory, you have a sure tip on the direction of the next major move.

• **Sit Tight**—You don't have to believe the Dow theory, of course. But it looks like good sense to sit tight until you get a better indication than you have right now which way the market is going to go.

For the industrial average is in a crucial position, within striking distance of the 1946 high (BW—Feb. 11 '50, p. 88). If it goes through that, it could get off to a real postwar bull market. On the other hand, you can find plenty of technicians who have the feeling that the market has already seen the top of this move.

• **Major Testing Area**—For example, one well-known chartist finds that, according to his system, the pattern of the abortive 1946 and 1948 highs is now repeating itself.

It's becoming more and more evident that the range between 200 and 212 on the Dow-Jones industrials is a major

Security Price Averages

	This Week	Month Ago	Year Ago
Stocks			
Industrial	167.9	167.0	164.5
Railroad	44.0	42.9	43.9
Utility	85.3	84.8	84.3
Bonds			
Industrial	101.9	102.1	102.1
Railroad	86.3	86.1	86.9
Utility	100.9	100.9	100.5

Data: Standard & Poor's Corp.

testing area for the market. It may be some time before there's a clear indication of how the test will come out. The market might easily turn down for a while, then make another try at getting through the resistance area later in the year.

In other words, this is one of those times when most smart stock traders wait to see which way the cat will jump. They may miss a few points on the next move by playing safe now, but they also reduce the danger that they will lose their shirts.

The 1949-50 Bull Market: Current Box Score

—Standard & Poor's Weekly Stock Indexes (1935-39=100)—
Feb. 15, 1950

Stock Group	1946 High	1949 Low	1949 Year End	Feb. 15, 1950	Compared with— 1946 High	1949 Low
Leather	221.9	58.9	105.8	309.8	+50.5%	+86.4%
Television, electronics	*	115.0	147.5	186.4	—	+62.1
Utility holding companies	160.0	104.5	161.9	169.1	+5.7	+61.8
Radio broadcasting	224.1	108.7	144.6	175.1	+21.9	+61.1
Paper	328.6	218.5	333.6	343.0	+4.4	+57.0
Soaps	149.1	118.1	172.3	176.7	+18.5	+49.6
Ethical drugs	165.4	113.9	165.4	169.7	+2.6	+49.0
Office, business equipment	165.1	140.2	189.5	206.9	+25.3	+47.6
Finance companies	113.1	90.7	121.4	128.8	+13.9	+42.0
Dairy products	250.1	160.7	219.0	227.7	+9.0	+41.7
Automobiles	166.0	106.3	141.6	149.7	+9.8	+40.8
Food chains	248.6	169.2	223.8	238.2	+4.2	+40.8
Aircraft manufacturing	183.1	96.3	113.8	132.6	+27.6	+37.7
Low-priced common stocks	315.7	102.4	127.3	140.6	+55.5	+37.3
Tires, rubber goods	307.4	157.0	190.0	213.8	+30.5	+36.2
Steel	159.5	104.6	132.8	142.4	+10.7	+36.1
Meat packing	203.0	105.7	134.1	142.4	+29.9	+34.7
Electrical equipment	133.3	86.0	109.6	115.8	+13.1	+34.7
Distillers	634.8	249.4	325.0	335.2	+47.1	+34.4
Fertilizers	305.4	188.3	249.2	250.0	+18.2	+32.8
Building materials	161.8	100.0	132.7	132.8	+17.9	+32.8
Chemicals	151.8	121.9	159.3	161.5	+6.4	+32.5
Capital goods stocks	147.0	103.4	129.5	134.1	+8.8	+29.7
Department stores	345.8	173.8	213.2	223.2	+35.5	+28.4
Glass containers	162.9	86.9	106.2	111.4	+31.6	+28.1
Metal containers	94.0	68.8	83.2	87.7	+6.7	+27.5
Baking, milling	177.0	148.1	184.3	187.2	+5.8	+26.4
Air transport	593.1	193.3	225.5	244.1	+58.9	+26.3
Consumer goods stocks	175.8	115.3	141.5	145.2	+17.4	+25.9
Gold mining (U. S.)	106.8	59.1	77.0	74.3	+30.4	+25.7
Soft drinks	188.4	108.9	134.6	136.3	+27.7	+25.2
Auto parts, accessories	170.2	96.5	120.5	120.7	+29.1	+25.1
Agricultural machinery	160.5	106.0	126.4	132.6	+17.4	+25.1
Copper	147.1	96.2	115.2	120.1	+18.4	+24.8
Textiles	312.0	191.0	238.9	238.1	+23.7	+24.7
All industrial stocks	163.2	115.6	141.2	144.0	+11.8	+24.6
Shipping	459.7	334.2	386.0	415.2	+9.7	+24.2
High-grade common stocks	135.5	108.7	131.1	133.9	+1.2	+23.2
Composite index	188.6	110.7	133.8	136.3	+14.1	+23.1
Railroads	168.8	87.0	103.3	107.0	+36.6	+23.0
Printing, publishing	285.5	96.8	117.0	119.0	+58.3	+22.9
Confectionery	130.5	109.3	131.8	133.5	+2.3	+22.1
Machinery	154.6	97.3	118.0	117.7	+23.9	+21.0
Shipbuilding	244.7	157.2	179.5	189.9	+22.4	+20.8
Utility operating companies	132.6	94.1	110.1	113.0	+14.8	+20.1
Household supplies	169.9	89.2	103.4	105.9	+37.7	+18.7
Mail order, general chains	241.1	162.1	195.2	191.9	+20.4	+18.4
Metal fabricating	178.2	90.3	103.5	106.3	+40.4	+17.7
Natural gas	*	166.2	191.8	193.6	—	+16.5
5c, 10c, \$1 chains	156.9	118.3	136.6	136.7	+12.9	+15.6
Tobacco products	105.1	77.8	91.6	89.8	+14.6	+15.4
Railroad equipment	153.5	74.6	78.1	86.3	+43.8	+15.4
Proprietary drugs, cosmetics	240.3	123.5	135.8	139.4	+49.5	+12.9
Mining, smelting	113.0	70.3	77.7	79.3	+29.8	+12.8
Oil	169.8	148.4	171.9	167.1	+1.6	+12.6
Coal	230.7	190.9	207.9	214.5	+7.0	+12.4
Shoes	144.7	106.9	123.2	118.4	+18.2	+10.8
Motion pictures	350.3	142.7	166.9	158.0	+54.9	+10.7
Telephone, telegraph	129.1	87.3	92.8	94.9	+26.5	+8.7
Lead, zinc	139.7	85.1	91.0	89.6	+35.9	+5.3

* New index.

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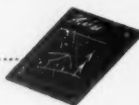
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LABOR



NEGRO AND WHITE work amicably side by side—once they've got jobs. The problem for a member of a minority group is to get a chance to show what he can do.

Does State FEPC Hamper You?

No, say employers in states where job-bias bans are in effect—not nearly so much as predicted. Management still has right to pick workers. Commissions agree laws make few new problems.

How much of a headache—if any—have state fair employment laws proved to employers? With FEPC coming up on Capitol Hill, and more anti-bias bills coming out of state legislatures in the next year or so, management has been pressing that question.

To get an answer, *BUSINESS WEEK* did some asking of its own. It queried a group of employers on just how state FEPC laws were affecting them. To get a fuller picture, it also queried state commissions.

Briefly, the answers boil down to this:

Employers agree that FEPC laws haven't caused near the fuss that opponents predicted. Disgruntled job-seekers haven't swamped commissions with complaints. Personal friction hasn't been at all serious. Some employers still think there's no need for a law. But even those who opposed an FEPC aren't actively hostile now.

Commissions say that the laws have created no new problems for either a business or a community. They haven't interfered with any employer's basic right to choose the most competent man for a job, the commissions

say. And the unanimous view is that minority groups are finding openings in places barred to them before.

I. The State Laws

Eight states have adopted enforceable FEPC laws since 1945. Two others have laws calling for employers to stop job bias on a voluntary basis. And laws have been proposed, so far, in 14 other states.

Enforceable laws are on the statute books in New York, New Jersey, Connecticut, Rhode Island, Massachusetts, Washington, Oregon, and New Mexico.

Nonenforceable laws are in effect in Indiana and Wisconsin.

Proposed laws are before the legislatures of Arizona, Colorado, Illinois, Indiana (to add teeth to the present law), Iowa, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, Pennsylvania, and Utah.

In addition, four cities—Chicago, Philadelphia, Milwaukee, and Minneapolis—have enforceable local ordinances barring job bias.

• **What the Laws Do**—FEPC laws in the eight states with enforceable statutes

are all modeled after the wartime executive order that terminated in 1945, and on the pioneering New York law (BW-Jun.30'45,p94). They have been through a pretty thorough shakedown period. But they have come through with only a few changes.

Broadly, these laws bear directly on an employer in three ways: (1) They bar him from refusing to hire, from discharging, or discriminating in advancement, because of race, religion, color, national origin, or ancestry; (2) they prohibit discriminatory job advertising; and (3) they ban questioning job applicants about their race or creed.

In all, the laws provide more or less tight job protection for so-called "minority group" members: Catholics, Negroes, foreign-born residents, Jews, and Mexican and Spanish-speaking residents.

II. The Commissions Report

Here's what state commissions had to say about the operation of their laws:

Connecticut—During the 1948-49 reporting period, the commission handled 65 formal complaints of job discrimination—58 against employers, 5 against employment agencies, 2 against unions. It also investigated 40 cases that did not lead to formal complaints.

Half the charges involved manufacturing establishments; most alleged discrimination in hiring. Two-thirds were valid complaints, "necessitating adjustment." All but one were settled without court action.

Generally, the commission reports "no unfavorable comments from anyone."

Oregon—Most of the commission's work thus far has been devoted to "disseminating information about the law." It has had four formal complaints of job bias—all from Negroes. One was dismissed for lack of evidence; one was substantiated and settled in conference with the prospective employer, who hired the complainant; two are still pending.

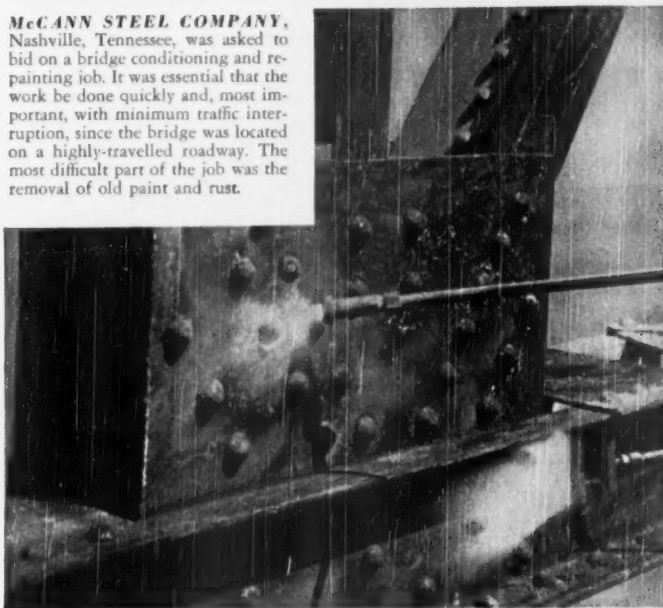
New Mexico—The commission has had "six or eight complaints," of which three weren't justified. The others are in the process of investigation or conciliation.

Massachusetts—In 1948 (last year for which there is a final report) the commission handled 142 complaints and settled 135 after investigation and conference—without "a single formal hearing or [having] a matter settled through conference brought into a court of law for further consideration." The other complaints were still pending when the commission reported.

The Massachusetts FEPC reports "scores of job opportunities" opened up

Oxyacetylene Flame Cleaning speeds bridge repainting —without traffic interruption

MCCANN STEEL COMPANY, Nashville, Tennessee, was asked to bid on a bridge conditioning and repainting job. It was essential that the work be done quickly and, most important, with minimum traffic interruption, since the bridge was located on a highly-travelled roadway. The most difficult part of the job was the removal of old paint and rust.



F. T. Wilson, Airco technical sales service representative, recommended oxyacetylene flame cleaning to remove scale and old paint prior to repainting. This process, requiring minimum equipment, leaves a warm, clean surface, which is conducive to a long-lasting paint job. Notice in the photograph how the river heads are being cleaned with a round tip and the flat surface is being conditioned with a wide flat tip.

The entire bridge was cleaned most satisfactorily, without disrupting traf-

fic too greatly. City officials were very pleased. Bids for reconditioning a second bridge across the Cumberland River will specify the use of flame cleaning.

If you have steel structures exposed to the elements, requiring long-time paint protection, investigate the advantages of Airco oxyacetylene flame cleaning. For technical service or copies of bulletins ADG-1066A, ADG-1067 and ADR-57, describing this process, please write your nearest Airco Office.

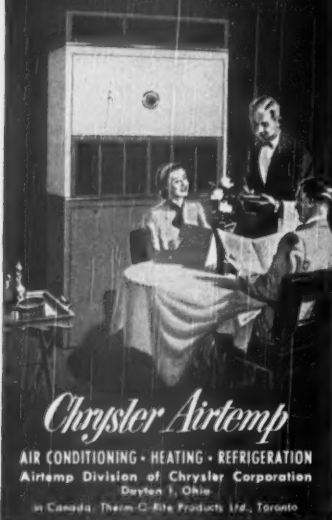


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for members of minority groups—including Negroes hired for the first time as retail store salesclerks. It said that a survey of settled cases indicated there had been "no burden upon employers with respect to either management-employee relationships or employer-customer relationships."

New Jersey—The commission disposed of 423 formal, 195 informal, and 131 miscellaneous complaints in 1948-49. Of the formal complaints, 74% charged discrimination in hiring practices, and 13% alleged discriminatory dismissals.

The commission reports it closed 40% of the cases amicably, through conference; it dismissed 40% for lack of evidence of job bias; and the complainant withdrew in 20% of the cases.

The commission said that a check of 79 major New Jersey employers indicated: (1) no new difficulties or problems in business policy; (2) no interference with their "basic right to select the most competent workers for [their] operations"; and (3) "as far as we know," the law has been "fairly and effectually administered." The commission had had no complaints of FEPC-bred "racial tensions" or of anyone's refusing or vacating a job "because of minority group employment."

New York—The New York board has been functioning smoothly for almost five years. As a result, says its general counsel, Henry Spitz, minority groups have had broader employment opportunities. They're accepted today "in places where they were never accepted before." The most noticeable spots: department stores and restaurants.

There's still resistance to job equality—and "a great deal" of discrimination. The commission is attacking these through educational efforts.

III. What Employers Say

Reports were received from companies operating in Connecticut, New Jersey, and New York, and from Aluminum Co. of America—which has plants in six FEPC states.

Some of the comments:

Alcoa—FEPC laws have made very little difference in personnel policies, although the company has made minor changes in application forms to comply with technicalities of the various laws.

The laws have not increased the labor supply—as FEPC proponents promised they would. Alcoa said its labor market "is substantially the same now as it would have been had these laws not been passed."

There have been a few cases "in which we have been accused of discrimination by an applicant, where actually no discrimination existed." So

Alcoa has had to adopt "more precise methods of evaluating the ability of workers and more elaborate records as a potential defense in the event of future charges of discrimination."

Posting notices of compliance with the laws tended "to irritate... employees who do not favor FEPC laws." So the company suggests more educational work among these groups.

Prudential Insurance Co.—The company has its home offices in Newark, where it employs a large white-collar work force. It feels that the job-bias ban has neither helped nor hurt—nor has it interfered with management's hiring prerogatives. Prudential has run into no opposition from employees to an anti-bias policy, and has had no discipline and grievance problems.

Elizabeth (N. J.) Iron Works—Management's normal rights have not been subjected to any serious pressures, and the New Jersey law hasn't "created any new problems." There have been "no adverse comments" from employees.

Bridgeport (Conn.) Brass Co.—In Connecticut, none of the "disastrous results anticipated by FEPC opponents... have come to pass—such as mass walkouts of employees forced to work with minority groups, loss of patronage by mercantile establishments, etc." Instead, the law is getting "voluntary acceptance... by the vast majority of employers, employment agencies, and unions."

It has "eliminated entirely a large and growing Communist campaign being waged... among the large urban Negro groups." It has widened job opportunities for minority-group members; but without interfering in the prerogatives of management "so far as we have yet noted."

The law has had no injurious effects on the company's personnel relations, has caused no grievance or disciplinary problems. It has been "ably administered"—with a determined effort to get "acceptance of the law through education rather than persecution."

Hat Corp. of America—The Connecticut law "has in no way interfered with our employment practices," this South Norwalk company reports. It has created no problems whatever.

Allen Mfg. Co.—This Hartford (Conn.) metalworking company has had no difficulties, is "much impressed" with the Connecticut law.

Pitney-Bowes, Inc.—The Stamford (Conn.) postage meter company "started a Negro integration program... before the enactment of the Connecticut [FEPC] act. Many of the problems which we encountered would have been much less difficult had we the support of [the] legislation." Pitney-Bowes believes the Connecticut act is "functioning very successfully."

Western Electric Co.—Plants under

New York and New Jersey laws "have not had any difficulty in meeting the requirements of these laws," and the laws have not "entailed any undue hardship on employers who are trying to do a conscientious job in employee relations." The laws "have been accepted generally by our employees."

New York Shipbuilding Corp.—The Camden (N. J.) firm reports no "interference with our right to select the most competent workers"—and "no added problems or difficulties."

N. J. Bell Telephone Co.—"No serious difficulties" have arisen under the New Jersey law, and there has been no interference with hiring on a basis of competence.

Lea Fabrics, Inc.—This Newark textile company was charged with discrimination shortly after the New Jersey law went into effect. On investigation, the company was cleared. After that first experience, the company has had "no new difficulties" in complying with the law, or in selecting the most competent workers.

St. Regis Paper Co. (Panelyte Division)—A few cases requiring state investigation have arisen at its Trenton (N. J.) plant, but the company reports "very little difficulty" with the state act. And it reports: "No problems that have not previously been with us have been raised since the inception of the law, nor has it interfered with our hiring procedure."

Group Surveys Ages Of Minneapolis Workers

How many industrial workers are now at retirement age—or nearing it? That's an important question for management, now that industry has to bargain old-age security.

Recently, Associated Industries of Minneapolis ran a survey to find the age distribution of the local labor force. It checked 531 firms with 83,578 employees—slightly more than one-third of the city's nonagricultural labor force.

It found that of nonmanagement employees:

- 3.1% were 65 or over
- 4.2% were from 60 to 65
- 5.9% were from 55 to 60
- 7.3% were from 50 to 55
- 9% were from 45 to 50
- 20.8% were from 35 to 45
- 27.4% were from 25 to 35
- 15.5% were from 20 to 25
- 6.8% were under 20

Associated Industries says that 155 of the 531 companies checked have pension plans. Of 154 plans outlined, 73 require retirement (mostly, at age 65), 81 leave it up to the worker—provided he is physically fit.



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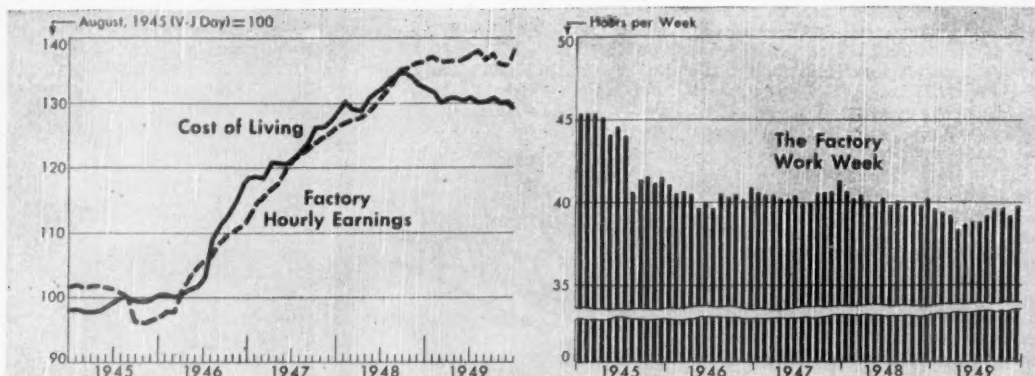
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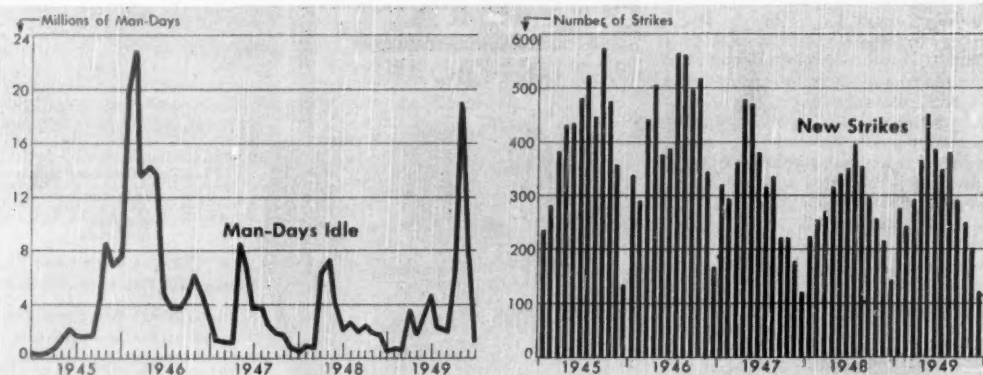
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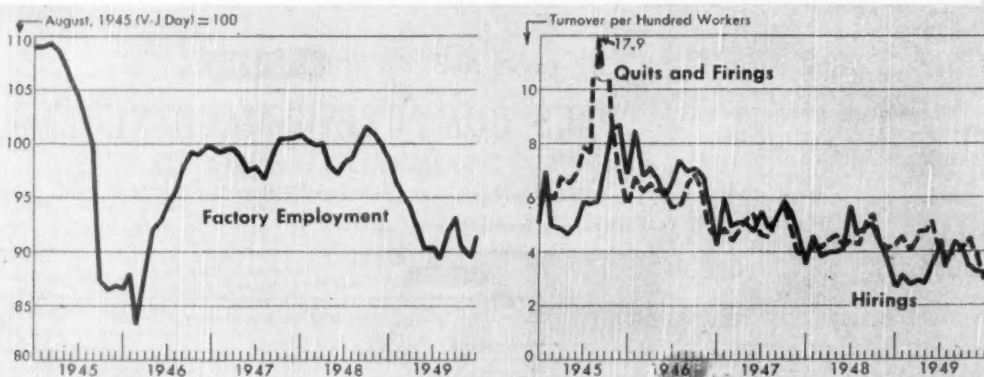
A Quick Appraisal of the Labor Market's



The Worker's Buying Power



The Strike Picture



The Labor Market

Date: Bureau of Labor Statistics

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Balance Sheet

Fourth-round hikes get into the picture and widen spread between hourly earnings and cost of living.

Important thing about this fourth-quarter picture (below) of the labor market is the spread between factory hourly earnings and the cost of living.

Labor's fourth-round contract gains since the last BUSINESS WEEK quarterly report (BW—Nov. 26 '49, p94) sent hourly earnings to a new postwar high—38% above the August, 1945, base figure. During the same period, c.-of-l. eased to 30% above August, 1945.

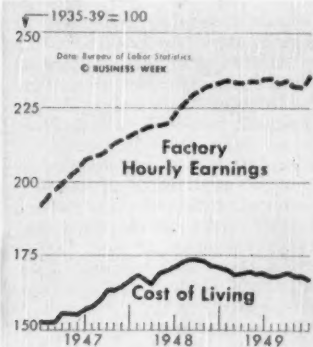
The wider gap between earnings and costs shows up at the end of a year of wage-price stability. Through most of 1949, wage and cost indexes ran parallel courses, month by month.

Meanwhile, the factory work week dropped during the fourth quarter, then recovered to an average 39.6 hours.

• **The Strike Picture**—Steel pension strikes and labor disputes in the coal industry sent man-days of idleness soaring in October. Lost time (about 18-million man-days) approached the 1946 peak for the first time. And the man-days-idle chart doesn't reflect UMW's two-day-a-week "stabilizing" shutdown in coal fields when the three-day week was in operation.

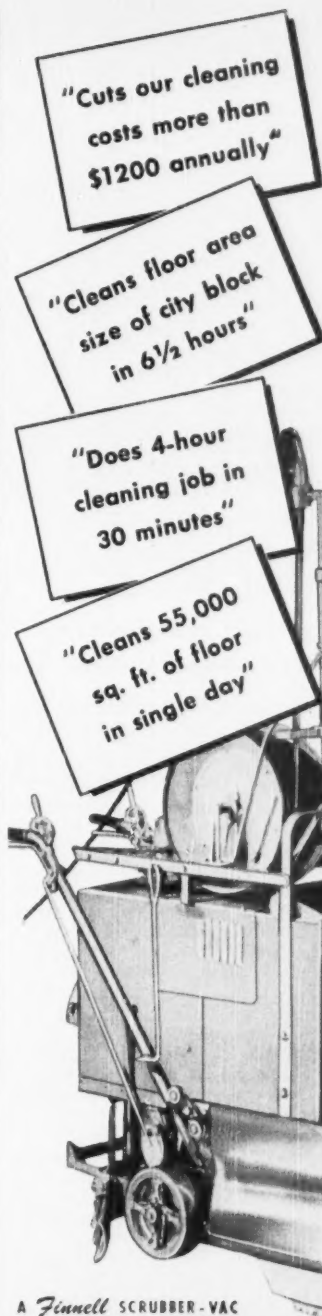
Despite the high man-day idleness, the number of new strikes ran about the same as 1948.

• **The Labor Market**—Factory employment turned up a little during the fourth quarter—but ran substantially under 1946, 1947, and 1948 year-end levels. Quits and firings continued a postwar decline, dropping to three per 100 workers. Hirings (3.2 per 100) did little more than balance quits.



RELATIONSHIP of hourly wages and the cost of living on a prewar base.

BUSINESS WEEK • Feb. 25, 1950



OTHERS SAVE ON LARGE-AREA SCRUBBING

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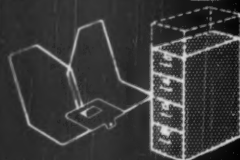
Have a talk with the nearby Finnell man. See what you would save with a Finnell Scrubber-Vac. Incidentally, it's good to know that when you choose Finnell Equipment, a Finnell man is readily available to help train your maintenance operators in its proper use. For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3802 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



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February 15, 1950



The Board of Directors has declared a quarterly dividend of 37½¢ per share on the outstanding Common Stock of the Company, payable on March 31, 1950, to stockholders of record at the close of business on March 10, 1950. Checks will be mailed.

CHARLES C. MOSKOWITZ
Vice Pres. & Treasurer

BUSINESS OPPORTUNITIES

Offered or wanted, personnel, financing, equipment, etc., may be found in Business Week's clues



EX-CIO OFFICIAL, Clinton S. Golden, popped the question . . .

What Makes for Labor Peace

National Planning Assn. is halfway to its answer—by case-study of peaceful plants. Its seventh report is out this week.

Three years ago, the National Planning Assn. set out to learn how much labor peace we have, and what causes it. This week, NPA reached the halfway mark in its project: It issued the seventh of 14 case studies on successful collective bargaining.

This latest study reports on the Nashua Gummed & Coated Paper Co. plant at Nashua, N. H. The company and seven AFL unions (with fewer than 700 members) have done business together for 15 strikeless years. Their record of bargaining during that time is notable for "patience, hard work, and good will," says NPA.

NPA broke down the major factors contributing to labor peace at Nashua into two main groups: (1) environmental factors; and (2) bargaining approaches.

• **Environmental Factors**—NPA says Nashua's organization and policies make for steady employment and good working conditions. Further, the company has been able to afford wage increases and "fringe" benefits.

On the union side, NPA says, sound leadership and autonomy of the Nashua local unions have built a good bargaining relationship. The locals—of paperworkers, bookbinders, pressmen, stereotypers, photoengravers, operating engineers, and firemen—bargain without pressure from their internationals.

• **Bargaining Approaches**—NPA considers bargaining approaches more im-

portant than environmental factors. In many ways, the bargaining relationship at Nashua fits into a labor-peace pattern which began to show up in the first six NPA studies.

Some of the points in common in the Nashua and earlier studies:

- The company accepts strong unionism as an asset, stays out of the union's internal affairs, and doesn't try to divide the members from their union.
- The unions accept the need for private ownership, and for making a profit.

- Both translate their mutual trust and confidence into everyday action. They consult frequently, share information.

- Bargaining is never legalistic. It centers on day-to-day problems, shunning abstract principles. When an agreement is signed, company and unions concentrate on making it work.

- **Earlier Reports**—NPA's other reports, in order, have dealt with: (1) Crown Zellerbach Corp. and the Pacific Coast pulp and paper industry; (2) Libbey-Owens-Ford Glass Co. and Pittsburgh Plate Glass Co.; (3) Dewey & Almy Chemical Co.; (4) Hickey-Freeman Co.; (5) Sharon Steel Corp. (BW—May 21'49, p112); and (6) Lockheed Aircraft Corp.

NPA plans to issue eight more reports. Seven will be case studies. The eighth and final report, due probably in the summer of 1951, will summarize

the 14 studies, evaluate the findings, and draw conclusions. The individual reports will be combined later in book form.

So far, more than 2,000 complete sets of case studies have been ordered at a bargain rate of \$12.50 for 15 reports. And NPA has sold some 50,000 single copies at \$1 each.

Most of the orders come from universities. In more than 40 of them, NPA's reports are being used for classroom work in industrial relations courses. Companies and unions discussed in the reports are also buyers.

• **Idea**—NPA's project stems from a suggestion by Clinton S. Golden, a former CIO official. Golden told NPA: There's too much emphasis on labor strife; someone should do a study on labor peace. NPA took him up on it. The John Hay Whitney Foundation donated \$60,000 for labor-peace research, and the project was launched officially on June 18, 1947.

At the outset, NPA invited nominations of companies and unions with long records of labor peace. More than 900 companies were suggested, but only a few could be studied. So NPA chose representative firms in different industries.

To broaden the scope of the project, NPA's semifinal (14th) report will cover a score of smaller companies and their unions. In addition, an appendix to

WHAT NPA IS

Back in 1934 a group of businessmen, farm experts, and labor leaders decided their combined heads were better than one for thinking about national problems. They set up the National Planning Assn., a private, nonprofit organization, headquartered now in a century-old house in Washington. There a staff of 23 does the legwork for NPA's membership braintrust. Members include: Fowler McCormick, chairman of the board of International Harvester Co.; CIO president Philip Murray; Beardsley Ruml, director of R. H. Macy & Co., Inc.; pollster Elmo Roper; Allan B. Kline, president of the American Farm Bureau Federation; and many other leaders in their fields. NPA's president is H. Christian Sonne, president of Amsink, Sonne & Co.

NPA gets its money by contribution and from sale of its publications.

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BUSINESS CENTER DEVELOPMENT

Beginning March 18, 1950, private enterprise will be invited to participate on a land lease basis, in the development of a new central business district in the city of Oak Ridge, Tennessee. A 100 acre centrally located site has been planned for this development to meet the consumer demands of this active city of 33,000 population. The initial site preparation is now in progress. Private enterprise is invited to lease, erect and manage this development in whole or in part.

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OAK RIDGE • TENNESSEE

the final report will contain an exhaustive analysis of questionnaires filled out by 200 companies. This will attempt to point up factors which make for labor peace.

• **Negatives**—Right now, NPA expects the final analysis will show that there is no common physical factor that can bring a sure labor peace. That's something that can't be won by a formula—no matter how much consideration it gives to a company's size, wages, bargaining structure, kind of union, etc.

The analysis also is expected to demonstrate that high wages are not an ironclad assurance of peaceful relations with a union. The coal miners are the highest paid group of workers in the country—and probably in the world.

Pensions—Plus

UAW trots out a flock of new wage demands to keep up rank-and-file support of the Chrysler strike.

The hard-won contract between Chrysler Corp. and the United Auto Workers (CIO) was something the union was "particularly pleased" about three years ago. Now the union wants it rewritten.

That's the latest development in the month-old strike at the Detroit auto company.

• **New Demands**—When the agreement was signed in 1947, Norman Matthews, head of UAW's Chrysler department, reported: "Union negotiators are particularly pleased with the removal of inequities in approximately 80 classifications." Yet Matthews now has filed demands for a whole raft of wage changes.

The union claims it has actually filed only 10 proposals—in addition to the pension and insurance demands which touched off the walkout Jan. 25.

By Chrysler's count, however, new demands run close to 200. And the list is still growing. That's because each union demand is so broad that it involves many other changes, too. Each may have to be taken up individually during bargaining sessions.

• **Orthodox**—Basically, the contract demands are orthodox. UAW wants a union shop; more powers for the impartial umpire; an improved grievance procedure; an end to geographical wage differentials; promotion strictly by seniority; elimination of classifications and wage inequities; an end to merit spreads; higher vacation pay with liberalized eligibility for it; and overtime pay for work on Saturday as such.

The appearance of new contract de-

mands complicates a settlement of the dispute. For about a week negotiations consisted of nothing but presentation of these demands. Normally, the company will make detailed rebuttals to each of them.

• **Pensions?**—Meanwhile, the basic issue of pensions is sidetracked. Some Detroiters expect that it will stay so for at least a few more weeks. Reason: What Chrysler and the UAW do hinges partly on the meaning of the Ford pension program—and no one is quite sure yet what Ford's program actually means (BW—Feb. 4 '50, p84).

The union maintains that it got a guarantee of \$2 an hour from Ford to be paid into the pension plan. Ford's position is that the amount to be paid in is flexible, contingent on actuarial requirements.

There's no telling when that confusion will be ironed out. Ford and the auto union are trying currently to fill out their plan with details. Though it is due for completion Mar. 15, construction of Ford's plan is way behind schedule. Yet pension payments are to begin at the Rouge Apr. 10.

Meanwhile, at Chrysler the union won't backtrack from what it feels it gained at Ford—particularly with General Motors and other negotiations coming up later. The company is willing to match Ford benefit payments—even improve on them—but it refuses to commit itself to fixed payments into the fund. Says a Chrysler executive: "Fixed payments would create a \$65-million kitty for the union to go after."

• **Why Complicate It?**—The Chrysler strike was caused by this pension deadlock—and can be settled by agreement on that point alone. Why, then, did the union trot out these complicating contract demands? There are two reasons:

(1) Pension demands are an abstract issue over which to strike—they may not hold rank-and-file enthusiasm over a long pull. But demands for improved rate reclassifications and other fringe demands are proven sustainers of membership militancy.

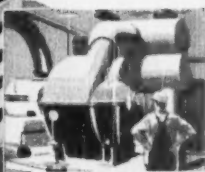
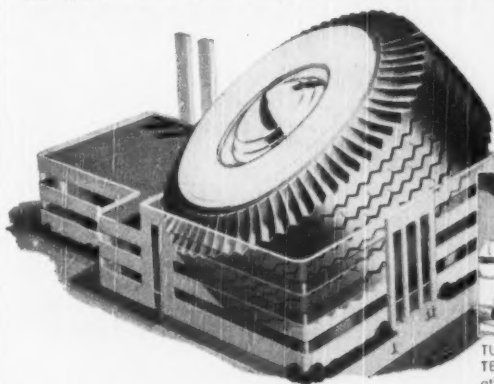
(2) There has been agitation by anti-Reuther elements at the local level for wage boosts rather than pensions. It is part of the usual UAW factionalism which feeds on every important union issue. By shifting emphasis in negotiations into other channels, these elements can be largely disarmed.

The Pictures—Acme—124; Buble, Standard Oil Co. (N. J.)—114; Webb, Standard Oil Co. (N. J.)—19 (1); Wide World—19 (1), 21, 26, 46, 132, 135; Dick Walters—40, 120.

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TIRE RUBBER is cheated of much of its potential endurance when it's produced at high temperatures. That's why, in the Rubber Reserve Corporation's "cold rubber program," York Refrigerating Equipment is called into play.

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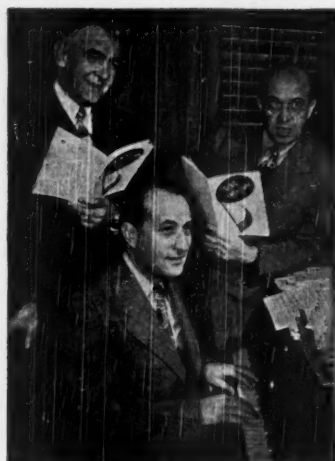
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LABOR BRIEFS



Union songwriters, Gerald Marks (at piano) and Milton Pascal (right) run over a new labor song with Al Hayes (left), head of the International Assn. of Machinists. IAM retained Marks and Pascal to write new songs—complaining: "All our best songs, like 'Solidarity Forever,' have been stolen by the Communists."

CIO's purge continues. Four more allegedly Communist-line unions were expelled last week: Mine, Mill & Smelter Workers; Office & Professional Workers; Public Workers; and Food, Tobacco & Agricultural Workers. CIO ousted the United Electrical Workers and Farm Equipment Workers last year.

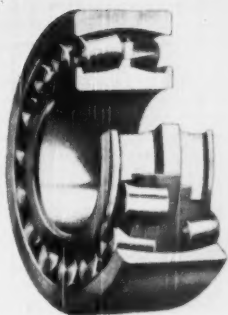
A new pension plan has been signed conditionally by Sinclair Refining Co. and CIO's oil workers' union. It provides \$125-a-month minimum pensions at age 65 after 20 years on the job. After 10 years, a covered employee who quits can collect 50% or more of the funds in his account.

Pensions in 1951—that's the present schedule for CIO's textile workers. They didn't ask any increase in 1949-50 bargaining, but union has told insurance and pension research aides to go ahead with advance work.

A living-cost drop from 167.5 in mid-December to 166.9 on Jan. 15 (page 20) means a 2¢ cut in General Motors pay. It's the third straight cut since an initial 3¢ upward adjustment in July, 1948. And for the first time there's a slice taken out of GM's original c.-of-l. bonus given in its March, 1948, escalator contract.

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To handle heavy loads in rotary tables, The Brewster Company specifies Torrington Angular Contact Ball Bearings. They carry not only the thrust load but also the radial load imposed by the driving gear and unbalanced weight.

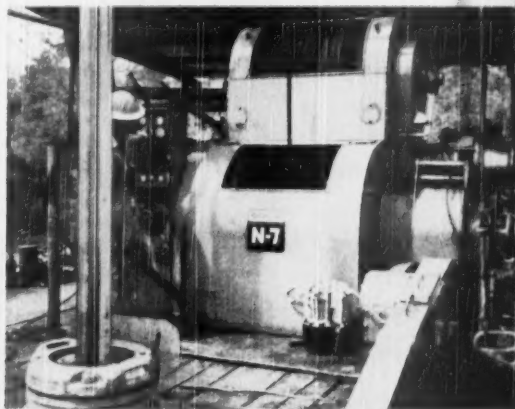
In the drawworks, where shafts are subject to deflection, Torrington Spherical Roller Bearings are used to insure smooth operation and long life.

These are typical examples of Torrington's ability to solve all kinds of friction problems. This experience with all major types of anti-friction bearings can be helpful in making your equipment give more dependable service. Why not consult our engineers on your next bearing application?

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OLD METHOD

SPEED NUT METHOD

Previous method of assembling: Raising stay on diffuser, using five parts. Machined metal block was riveted to back of top louvre with two rivets. Shoe supporting stay was then attached by screw.

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FASTEST THING IN FASTENINGS

INTERNATIONAL OUTLOOK

BUSINESS WEEK

FEBRUARY 25, 1950



One by one, Russia keeps knocking off U. S. listening posts.

First it was China. Now it's Bulgaria. Hungary may be next. In each case, there was an "incident" which forced us—to save face—to pull out. Of course, the U. S. would much rather maintain diplomatic relations with the satellites to pipe goodwill in, information out. But Stalin is making it awful tough to do that.

Tito proved he was a good Marxist and anti-imperialist by recognizing Ho Chi Minh's Communist Viet Nam Republic in Indo-China.

If he hadn't, the Cominform would have had its first clear-cut case against him. Tito's action should strengthen his relations with non-Russian Communists on both sides of the Iron Curtain.

It's not the danger of Russia's starting a war that gives Secretary Acheson the jitters these days. It's the mounting popular pressure for a deal with Stalin.

Trying for such a deal would be ultra risky—war could be brought closer by failure to agree. For many Americans tend to think that a fight is the only alternative to intimacy with Stalin.

Acheson obviously prefers a middle ground. He feels Stalin's ambitions can be blocked without any shooting—or conference, for that matter.

There's no real evidence yet that the H-bomb has brought war any closer.

All the signs are that Moscow still counts on political conquests. That's how Stalin got China on his side. That's how he is trying to undermine Europe and southeast Asia.

You don't find the Russians threatening anybody with atom bombs. That wouldn't bring world communism any closer.

Stalin isn't repeating in China the mistakes he made in Yugoslavia. That's the thing that stands out in last week's Russian-Chinese treaty.

When Tito got too independent, Moscow read him out of the Communist club and left him no way to get back.

Stalin is taking no chances with Mao Tse-tung, who is a potential Tito, at least in theory. So Stalin has made concessions to Chinese nationalism (BW-Feb. 18 '50, p123). Still, you can be sure today's concessions are only a matter of tactics. Stalin aims to control China in the end.

U. S. policy is to lure Mao—or some other Chinese leader—to resist the Russians when it's feasible.

That means U. S. recognition of Communist China as soon as Congress can be won over. In time, it means U. S. trade with China, too.

Thus, it looks like a long poker game between the Kremlin and the State Dept. The U. S. may be losing in China now. But there is no sign that State is ready to walk out of the game.

Paris has its own angle on the Russian-Chinese deal.

French officials say that Mao gave a firm promise to Stalin on Indo-China. He agreed to ample Chinese aid for rebel leader Ho Chi Minh.

This is the line the French will take in asking for U. S. aid in Indo-China.

Some French colonial experts think there's something more important than military help, if Indo-China is to be saved.

These experts say that, before the U. S. grants special aid, it should

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

FEBRUARY 25, 1950

demand two changes in French policy: (1) loosening of France's control over business in Indo-China; and (2) a guarantee that French troops will withdraw as soon as Ho is beaten.

Don't overrate Communist trouble-making along the French waterfront.

True, the Communists are trying to halt U. S. arms for France and French arms for Indo-China. But even among the dock workers there is strong support for the government.

What's more, Communist sabotage could strengthen the wobbly Bidault government. For example, the French Socialists hint they will take office again with Bidault if the Communist campaign gets serious.

Even before the votes are counted, you can tell that the next British government must decide four important issues right off.

First comes the April budget. The Chancellor in office will have a big surplus for the fiscal year that ends in March. But things won't stay that way. During the next fiscal year, the cost of social services is bound to go way up.

So another surplus won't be possible—unless either food subsidies and government housing loans are cut, or taxes climb even higher.

But let a British Chancellor forget his surplus these days, and inflation starts again. And inflation spells trouble for British exports.

Here are the other three problems that need answers:

Whether to ask for a second American-British-Canadian financial huddle in Washington. If the answer is yes, and the U. S. accepts, look for discussion of Britain's sterling war debts—and how the U. S. can help to pay them off.

What incentives British industry needs to go after sales in the dollar market. British businessmen have asked for the incentive system used on the Continent—the exporter to keep 10% of his dollar earnings.

How to deal with the wage problem. Retail prices will be rising soon, as an aftermath of devaluation. Hence, a flat wage freeze won't work any longer. Union leaders know how rising costs can hurt British exports. But they know, too, that they can't keep workers in line with this argument.

British steelmakers are feeling highly competitive these days—at least when it comes to foreign business.

The British Iron & Steel Federation claims that British prices on most steel products are 25% under American quotations.

The BISF doesn't seem worried about European competition, either. The British agree that western Europe may have a big surplus steel capacity by 1953. But they don't think it will hurt them. They expect to hold the lion's share of European steel exports nevertheless.

Paul Hoffman is asking Congress for \$2,950,000,000 for ERP's third year.

More significant than the over-all figure, though, are these:

ECA wants \$600-million set aside to encourage freer trade. Most of it would be used to finance the western European currency union that ECA is pushing.

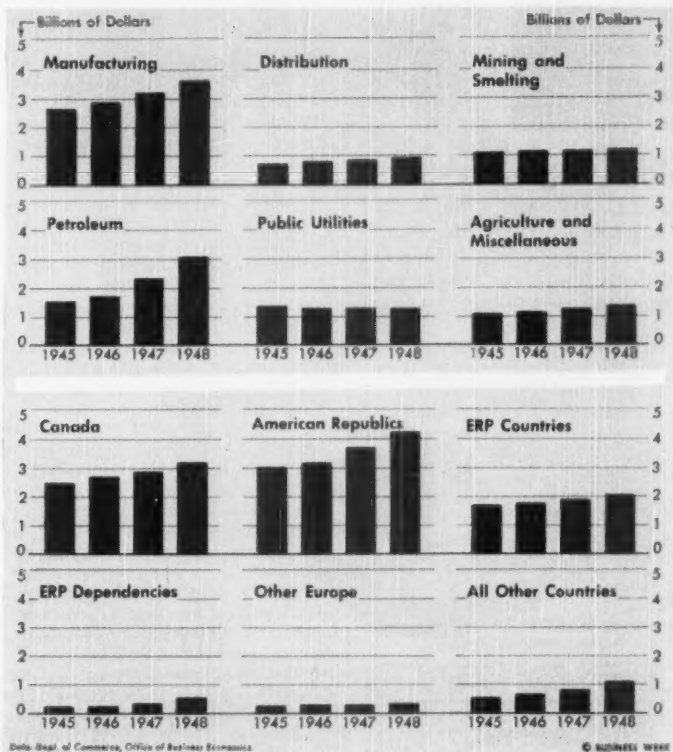
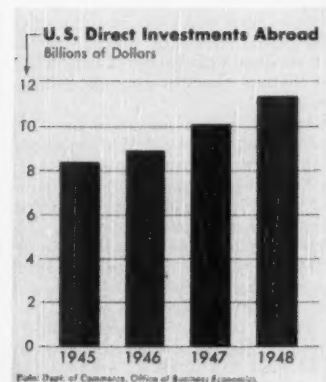
ECA doesn't think that western Europe can sell more than \$1.25-billion here in 1953. Yet to bridge the dollar gap Europe should sell at least \$2-billion worth of goods in the U. S. (The total now is about \$1-billion.)

BUSINESS ABROAD

Where U. S. Had Foreign Investments, 1945-48

WHICH INDUSTRIES?

The big postwar gains in U. S. direct investments abroad have been in manufacturing (\$900-million) and petroleum (\$1.5-billion). Manufacturing has expanded largely by reinvestment of foreign earnings.



WHICH COUNTRIES?

The main locations where U. S. capital is invested are Canada (manufacturing); Latin America (petroleum and manufacturing); western Europe (manufacturing); and the Middle East (petroleum).

U.S. Concerns Build More Plants Abroad

Early this summer Fred Chapin will be making an important trip. Chapin is president of National Acme Co., Cleveland machine-tool builder; he is heading across the Atlantic to see what he can do about salvaging National Acme's export business—whether, for instance, European production facilities would turn the trick.

- **Underpriced**—Chapin won't be the only manufacturer to go abroad this year on such a mission. Many U. S. companies are trying to find the answer to the problem National Acme faces. For some it has become especially acute since last September's currency devaluations cut many a European producer's prices below the American level. Others have decided to launch an overseas operation or add to a present one.
- **Bigger Year**—There's no way of telling how many U. S. manufacturers may

be investing abroad this year or how much they will invest. But from the evidence available now it looks as if 1950 will be a bigger year for investment in foreign branch plants than 1949. Last year new investment in foreign manufacturing slumped to about half 1948's \$400-million. But devaluation was in the air during most of the year and this held up many decisions that would otherwise have been made.

(Devaluation, though, had little to do with the big drop in total U. S. direct investments abroad from over \$1-billion in 1948 to less than half that in 1949. That drop was due largely to the cutback in petroleum investment.)

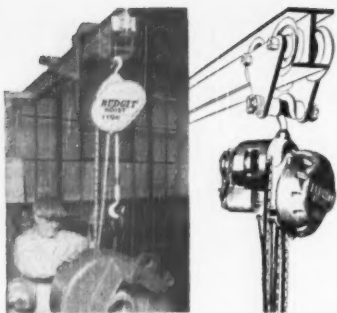
- **Reasons**—National Acme's reasons for wanting to produce on the continent of Europe are simple enough. The company's British affiliate, BSA of Birmingham,

doesn't produce the larger machine tools that National Acme makes in its Cleveland plant. These heavy tools are in strong demand on the Continent, but the dollar shortage is drying up business for Cleveland. That was happening even before devaluation.

So National Acme's idea is to produce on the Continent the machine tools that are not made in Birmingham, West Germany, Belgium, or Switzerland are likely spots. The big question-mark over Germany is the problem of getting profits out.

- **Ready to Build**—Another U. S. machinery maker is a stage ahead of National Acme in its planning. This company, which makes earth-moving equipment, has virtually decided to build a branch plant in Britain (though it's still not talking for the record).

The story here is not unlike that of



Muscles waste money

When electric lifting with a 'Budgit' hoist replaces manual lifting (or some other much less effective hoist) the savings are quickly seen. The 'Budgit' pays for itself by saving from some to many minutes an hour. Even more important is the increased production from workers who find the job much easier, are rid of the danger of physical injury from lifting and the weariness of daily overtiredness. There are no installation costs—hang up, plug in and use. Trifling current consumption! Install one for your own proof.

Made in sizes to lift 250, 500, 1000, 2000 and 4000 lbs. Prices start at \$119. Write for Bulletin No. 591.



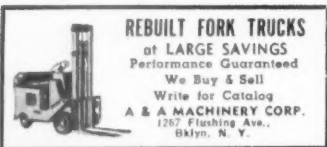
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Clues appears on page 132.

National Acme. The company expanded rapidly at the end of the war, expecting to serve its customers throughout the world from its enlarged U.S. plants. But first the dollar shortage caught it. Then devaluation pretty much froze this company's products out of the markets of Europe and the European overseas dependencies.

Demand for its equipment is especially heavy in the colonial areas of the world for irrigation, reclamation, and dam-building projects. With so much of the under-developed world using sterling, the company figures that Britain is a natural place to locate a plant.

• **Get in There**—U.S. companies that have been long established abroad are expanding their operations. As with the two machinery makers, the problem is how to get around foreign import restrictions. In general the only method seems to be to get in and produce behind the barriers.

Here are some examples of what these companies are doing:

International Harvester Co. is expanding its operations in France. I-H has purchased a plant at St. Dizier, which it is revamping for production of medium farm tractors. Output will go to the French market, North Africa, and perhaps to northern Italy. Funds for the expansion will come mostly out of previous earnings of I-H's French subsidiary.

• **Deal**—In Australia, I-H has used a novel method of expanding its investment. I-H's Australian subsidiary needed additional capital, and Australia needed more crawler tractors for construction programs. But the Australian government would not provide dollar exchange for imports of crawler tractors from the U.S.

So I-H made a deal with the Australian government to clear about \$1.5-million in tractors for import. These are being sold by the Australian subsidiary. The subsidiary pockets the entire proceeds as an addition to its working capital. The parent company in Chicago takes its payment in stock of the Australian company.

• **Choice**—Joy Manufacturing Co. recently announced that it is expanding its manufacturing operations in Scotland. The decision is in line with Joy's whole postwar policy—offering customers anywhere in the world whatever kind of engineering they want in mining equipment.

For example, Joy can quote on installations for which part of the machinery comes from the U.S. and part from Britain. The great advantage of the British plant is this: Many companies in the world use British electrical equipment and British electrical safety standards for their mines. So Joy builds its equipment in Scotland with this in

mind. Other parts of Joy machinery are interchangeable with the American-made product.

• **Hard Currency**—Goodyear Tire & Rubber Co. has an important European branch plant in the works—a \$5-million tire factory in Luxembourg. (Goodyear's other European plants are in Britain and Sweden.) The choice of Luxembourg seems to have been dictated mainly by the country's economic tie-up with Belgium, a hard-currency nation. This means Goodyear's new Luxembourg operation should be relatively free of exchange troubles.

• **South America, Too**—Abbott Laboratories, Chicago, is setting up plants in Brazil and Chile. Abbott says that its sales in these two areas have grown to the point where the market can be served more cheaply by manufacturing on the spot than by exporting to those areas.

• **Autos**—The two leaders of the U.S. auto industry, General Motors Co. and Ford Motor Co., have extensive modernization programs under way in Britain. GM's British subsidiary, Vauxhall Motors, Ltd., has launched a £10-million (\$28-million) retooling and expansion program. The capital is being raised either locally or from earnings of the British company.

There's a strong link between GM's move to expand abroad and company estimates that its 1950 exports from the U.S. and Canada will be down 30% from 1949. (GM exports in 1949 were 30% below 1948.) The decision also fits with GM's complex overseas assembly setup. GM assembly plants throughout the world will now have a better chance of buying from either Britain or the U.S. Where an assembly plant is short of dollars but has sterling, that choice is an important one.

Ford's British subsidiary, Ford Motor Co., Ltd., has an \$11-million retooling program in the works. But Ford has a special angle in its financing. The subsidiary will have \$4.5-million available in FCA funds to buy machine tools and other equipment in the U.S. Of course, Ford, Ltd., like any other British company, has to pay the British government an equivalent amount in sterling.

Ford also has expansion programs under way in its Swedish and Egyptian assembly operations.

• **Cost Lead?**—One factor that is hard to estimate at the present is relative production costs between a U.S. and, say, a British branch plant. Some British operations of U.S. companies can already undersell the parent firm in the Latin American market. Others are producing cheaply enough in Britain to make head offices wonder whether some items shouldn't be produced in Britain and imported for the U.S. market.



Better-than-ever Spry... HERE'S ONE REASON WHY!

THERE ARE PLENTY of good, sound reasons why new "Better-than-ever" Spry has become a baking and frying favorite of American housewives by the millions. Basically, however, it's a matter of improved product quality . . . brought about by better ingredients, better manufacturing methods, better equipment.

And that's where Votator comes in...

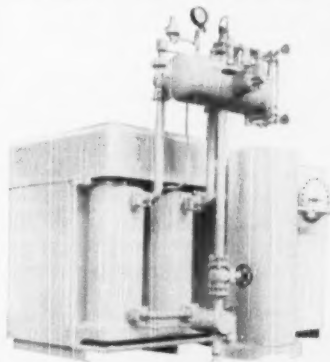
At both the Hammond, Indiana and Edgewater, New Jersey plants of

Lever Brothers Company, Votator processing apparatus plays an important role in the conversion of vegetable oils into pure, bland, creamy-white Spry.

Lever Brothers, like many other prominent oil-processors, quickly recognized the advantages of continuous operation that increase production, controlled operation that assures consistent high quality, and closed-system operation that safeguards product purity. They were keenly interested, too, in the

savings effected in labor, space, and production time.

What Votator processing apparatus has accomplished for Lever Brothers, it can do for you. Remember this: *if you process any liquid or viscous material involving the transfer of heat, it will pay you to call or write today.*



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VOTATOR DIVISION

THE *GIRDLER* CORPORATION

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Aluminum: Back to Protection?

Reynolds Metals, charging foreign competition hurts U.S. producers, is ready to ask for hike in import duties on aluminum. Outcome may decide whether U.S. will abandon freer trade.

Early in March, Reynolds Metals Co. will ask the Tariff Commission to boost import duties on both crude and wrought aluminum. It will be just one more sign that U.S. aluminum producers are feeling the pinch of foreign competition.

The Reynolds bid will be one that many U.S. businessmen will watch closely. The outcome may decide whether the Administration is going to revert to protectionism, or stick to its policy of freer trade.

Besides its broader implications, the case may bring into the open a family squabble within the aluminum industry. Reynolds plans to use the Justice Dept.'s antitrust case against Aluminum Co. of America to support its brief before the commission.

• **Geneva Cuts**—The tariff issue goes back to the Geneva conference of 1947, when the U.S. cut import duties on crude aluminum from 3¢ a lb. to 2¢ a lb. At the same time, it pared tariffs on wrought aluminum products, such as

sheets, plates, bars, and coils, from 6¢ a lb. to 3¢ a lb.

Reynolds wants the President to raise duties on crude and wrought products to 4.5¢ a lb. and 9¢ a lb., respectively. Under the so-called escape clause of the Reciprocal Trade Agreements Act, tariffs can be raised as much as 50% above the 1945 base level.

• **Precedent**—What the Tariff Commission recommends and whether the President follows the recommendations will set a precedent for other relief applications that are bound to follow. Aluminum will be the first time that a major U.S. industry has put the escape clause to test—although clothes-pin manufacturers made a similar plea last year. The commission investigated that one and recommended no relief—and Truman followed this advice.

Chances are against the commission reporting favorably this time. Action returning tariffs to even the 1947 level—6¢ a lb. for wrought aluminum and 3¢ a lb. for crude—would be a complete



Diplomatic Huddle in Bangkok

U.S. diplomats met last week in Bangkok, capital of Thailand (Siam), to confer on Southeast Asia's big problem—expanding communism. Some of the officials found time for relaxation—and, doubtless, shop-talk—at the home of Thailand's Prime Minister Songkram Phinbun. Left to right are:

W. W. Butterworth, Assistant Secretary of State for Far Eastern Affairs; Ambassador-at-Large Philip C. Jessup; Prime Minister Phinbun; and Edwin F. Stanton, U.S. Ambassador to Siam. For Ambassador Jessup, the conference climaxes a two-month tour through the Far East.

reversal of present U.S. trade policy. Administration sentiment against tampering with negotiated tariff reductions is strong. Washington feels any increase would run counter to our role as the world's greatest creditor nation. It would make future tariff negotiations more difficult. And it might well result in retaliatory action by other countries—in this case, Canada.

• **Companies' Case**—For their part, the aluminum companies think they have a good case. It shows up well in trade figures since 1947. Though still a scant 11% of U.S. production, wrought aluminum imports increased from practically nothing in 1947 to almost 9,000 short tons in 1949. The aluminum companies say this rate of increase shows no signs of slowing. In fact, Kaiser Aluminum & Chemical Corp. and Reynolds both contend that if tariffs aren't raised, Aluminum Co. of Canada will build a rolling mill to match its mammoth crude production plant. Alcan crude capacity alone comes close to total U.S. output.

On imports of crude, shipments have been running at about 10% of U.S. production. In the last month of 1949, they were on the rise.

Here's how the import-export picture shapes up over the last three years:

	Crude (in short tons)	Wrought
1947		
Exports	12,098	50,235
Imports	15,579	31
1948		
Exports	1,239	47,794
Imports	83,164	5,985
1949*		
Exports	8,008	27,756
Imports	56,180	8,852
1949		
Total U.S. Production, 603,462		580,850

* First 11 months only.

• **Costs**—The issues of cost differential will play a major role in the aluminum companies' testimony. Alcan is our biggest foreign supplier. It pays an average wage of 90¢ an hour, against \$1.53 in the U.S.; its power costs are 1 mill per kwh., against a minimum U.S. charge of 2 mills. This gives Alcan a 4¢ to 5¢ production advantage over U.S. producers. U.S. aluminum companies further contend that this cheaper crude is what supplies fabricating mills in Great Britain, which, in turn, sell wrought products on the higher-cost U.S. market.

Another point Reynolds will play on heavily is last September's devaluation both in Europe and in Canada. The company's brief will contend that this act of mass cost cutting fits the definition of an "unforeseen development" as allowed for in reciprocal trade's escape clause.

• **Family Trouble**—But there'll be more than a fight between industry and



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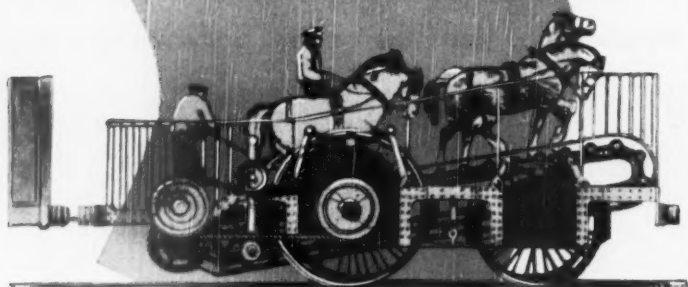
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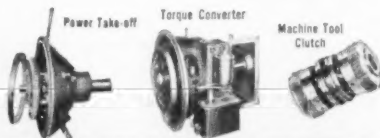
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SPECIALISTS IN INDUSTRIAL CLUTCHES SINCE 1918

government over the tariff issue. Troubles within the aluminum industry are sure to come to light if Reynolds carries through its plan to bring in the Alcoa antitrust suit.

Reynolds will insist that the Administration started antitrust proceedings against Alcoa in order to preserve the new, smaller producers. Now, Reynolds says, the rising imports have an Alcoa stamp on them: Eleven stockholders control both Alcoa and Aluminum Ltd., the holding company which controls Alcan and most of the fabricating plants in the United Kingdom. Reynolds' point would be that Alcoa's biggest stockholders wouldn't care what the tariffs were. They'd get their profits anyhow.

Alcoa, however, is going to support the industry in its demands for higher tariffs. It says the relationship between Alcoa and Alcan does not mean collusion or a lessening of competition.

Britain's Defense Cuts Hurt Aircraft Business

LONDON—Hard economic facts of life have forced Britain to make some important cuts in defense spending. The cuts are hitting the RAF. And the British aircraft industry is one of those that is feeling the pinch first.

Last October Prime Minister Attlee announced a blanket cut of £130-million in government expenditures. Of that total, £30-million was to be lopped off defense spending—£12.5-million of this by Mar. 31, 1950.

• **Lost Business**—Here is how the slice is hitting some of the aircraft companies: Bristol Aeroplane Co., Ltd.'s government order for Hercules piston engines has been "seriously" cut already. Handley-Page, Ltd., which specializes in four-engine bombers and transports, says that its order for Hastings transports from the RAF Transport Command has been cut back. Vickers-Armstrongs, Ltd., won't sell as many of its Valetta twin-engine transports as expected, either.

The RAF's transport command has had to absorb the major part of the cut in air strength. No one dares to pare fighter and bomber production for the still-below-strength RAF combat forces. British fighters are a key factor in the western European air forces brought together under the North Atlantic and Brussels pacts.

• **Review?**—Trade unions as well as aircraft companies have asked the government to review its cost-cutting decision. If Attlee is returned to office Feb. 23, the cuts are almost sure to stick. But if Churchill should win, the prospects for a review might be brighter.

BUSINESS ABROAD BRIEFS

Big Czech shoemaker, Bata, has an O.K. from Brazil to set up a \$600,000 local corporation. Authorized operations range from making shoes and synthetic rubber to running saw mills and soda fountains.

Fork lifts for Australia: Hyster Co. (materials-handling equipment) wants to spot a \$750,000 plant in Australia to manufacture for the sterling market.

British golfers will soon get two-wheeled caddies, complete with knee action. Britain's A.C. Car Co. will build the carts under license from Jarman-Williamson Corp., Portland, Ore.

Frozen lobster tails from Australia sold three times better in the U.S. last year than in 1948. The 1.5-million lb. of imports were worth \$968,000.

Canadian expansion is next step for Steel & Co., Ltd., British manufacturers of mechanical handling equipment. Steel recently beat out American competition for a \$5-million order from the Canadian government.

Pulp and paper experts from 12 countries are here on an ECA-sponsored junket. Their nine-week tour will brief them on the paper industry in New England and the Midwest.



First Envoy From Bonn

First postwar German envoy to U.S. is Dr. Hans Schlange-Schoenigen. The 63-year-old diplomat will carry the title of consul general, with duties limited to consular and commercial matters. A farm expert, Dr. Schlange-Schoenigen was clashed by Hitler as an "agrarian Bolshevik."

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The ITO Charter Should Be Ratified

The International Trade Organization is coming before Congress for the third time. Backers and critics agree that this time it will either be floated or left on the shoals as a monument to a vast amount of frustrated international negotiating.

American business itself is sharply divided. The National Assn. of Manufacturers, the National Foreign Trade Council, the U. S. Chamber of Commerce, and others have lined up against it. The Committee for Economic Development, the National Planning Assn. and the National Council of Importers are among those backing it.

The impressive array of organizations on both sides of the question is ample testimony to the complexity of the problem. After careful study, we line up with those who are supporting the charter.

In spite of its weaknesses, the charter is demonstrably useful in economic terms. And we think that ratification is important to preserve America's leadership in world trade and to strengthen the forces promoting free trade.

Disappointing

Admittedly the charter has major weaknesses. American business will get little benefit from ITO in the immediate future.

The charter provision outlawing import quotas has been made meaningless by a score of amendments and exceptions. For example, a special provision permits use of quotas to limit imports from countries whose currency is scarce. Since the U. S. makes less use of import quotas than any other major country, and since dollars are short, this provision has the effect of permitting discrimination against our goods.

The charter will also disappoint Americans looking for guarantees on foreign investments. It offers no more than a general declaration favoring fair treatment of foreign capital. Investors may well feel that the U. S. will have to obtain strong additional guarantees by diplomatic negotiation.

Even so far as the charter goes, ITO will have only powers of persuasion. The charter contains no enforcement provisions. It is difficult to see how the clause outlawing cartels, for example, can be enforced effectively through persuasion alone.

Beyond these specific points, many critics point out that the charter does little to restore unrestricted free trade. It does not sweep away restrictions; it accepts them and tries to limit their use.

Finally, the charter is riddled with loopholes and is so complicated that it is difficult to say what many points mean.

Best We Can Get

The question is: Could we get a better agreement by starting fresh, from scratch?

The thing to remember is that the U. S. is virtually the only country pushing for unrestricted multilateral trade. And even the United States has written into the charter several restrictions designed to protect particular American interests. Considering that most major countries do want restrictions, the charter on the whole goes a long way in the direction of American thinking.

Actually, the charter probably could not be stronger; it is unlikely that the major nations would give an international body any greater control than this over their domestic policies. At this stage, it seems, few international organizations can be more than sounding boards or, at best, arbitrators.

Positive Accomplishments

In spite of all its weaknesses, we think that the charter can help knock down the trade barriers between nations—and so, in the end, benefit American business. Several provisions have positive, immediate value:

(1) The charter outlaws discriminatory two-nation trading deals. Countries with government trading organizations would have to compete in world markets just as the free enterprise countries do. This is very important to American business and agriculture.

(2) Dumping goods in foreign markets at prices below domestic levels is prohibited, except for farm commodities (an exception put in by the United States).

(3) Tariff negotiations would be conducted selectively on the "most favored nation" principle—a basic point in U. S. tariff policy since 1934.

(4) Existing tariff preferences (such as our agreement with the Philippines) are to be honored—but preferences are not to be increased. The charter permits customs unions and mutual tariff reductions by neighboring countries.

(5) The charter outlaws a multitude of practices now widely used to limit imports.

All these are highly desirable objectives.

Now, what about the political questions involved?

First, and most important, is that the United States may lose its leadership in international trade affairs if it rejects the charter. We proposed the idea. We have supplied much of the effort behind it. Our approval of the charter would give confidence to the countries that now fear the U. S. may return to economic isolationism. Our approval in itself would strengthen the drive for freer world trade. And it would give us a foundation on which we could continue to promote free trade.

If the United States stays out, however, there is little reason to believe that the world can make any great progress toward freer trade. The time is not ripe for a stronger agreement. Past experience makes it doubtful whether much could be done through bilateral treaties.

Recognizing all the weaknesses, we believe ITO must be given its chance.

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Linen helps Britain buy America's tobacco



ABOUT 80 per cent of the linen Americans buy as cool summer clothing and snowy tablecloths is made in Northern Ireland.

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ABOVE: American farmer grades his tobacco and ties it into "hands" before taking it to be sold at auction. **LEFT:** Irish millman pulls linen from the rinsing bath after it has been chemically bleached.

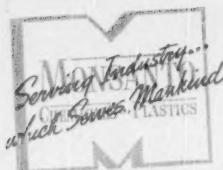


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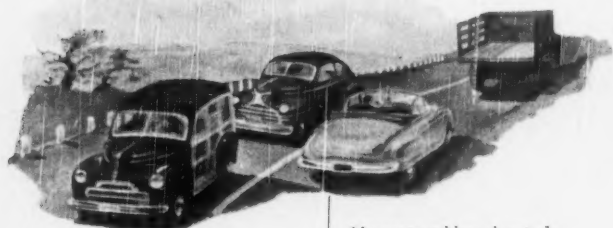
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Among the more than 400 Monsanto chemicals and plastics are found many short cuts to industry's main sources of profit—improved products, reduced costs, increased sales... If you are interested in any of these phases of your business, you are invited to consult Monsanto.



AUTO SHOW... 3,000,000 miles long

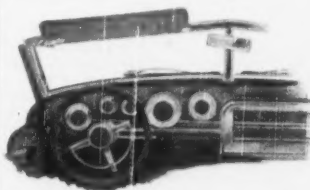
Every day, a traveling auto show is on the move over America's three million miles of highways. Everybody goes to this show—sees an endless stream of new cars which look better, run better, are better. Improved from bumper to bumper, these new cars stay newer longer; they give much more service at much less cost. Thanks for all this go to the automotive and related industries. They have long used many Monsanto chemicals and plastics to bring better transportation to America.

rubber on the road



Monsanto chemicals find wide use in the manufacture of tires and tubes. Also in many other products made of natural or synthetic rubber—floor mats, wiper blades, engine mounts, clutch and brake-pedal pads... One important group of

Monsanto rubber chemicals—accelerators—greatly speeds up "curing" time of rubber products; saves manufacturers millions of dollars a year. Another group, antioxidants, protects tires against deterioration; adds wear resistance that assures many more miles of service even when tires are exposed to air, sun, ice and snow.



where to look for plastics

Look to Monsanto for plastics. Some molding compounds, like Lustrex,* come in a full range of brilliant colors, including crystal clear—used for speedometer dials, horn buttons, escutcheons, direction lights. This versatile compound possesses unusual luster—doesn't absorb water—is chemically resistant—odorless... Salflex,* Monsanto's tough, transparent interlayer, puts the safety into safety glass... Ultron* is used in wire coatings; Resinox* in such molded parts as distributor heads, insulators, switches.



beauty on the highways

Many automobiles keep their showroom beauty for years and years because they are protected with finishes containing Monsanto resins. The Resimene* 880 series has special qualities that impart beauty, color depth and unusual durability to automobile finishes. These resins possess maximum gloss retention, excellent weatherability, scratch and shock resistance. Also, they provide manufacturers with all the advantages of high-speed production in baking synthetics.



extra miles come in cans

By blending Monsanto petroleum additives with motor oils, refiners develop lubricants with extra values that mean extra miles. Some of these additives, such as the Santolubes,* give motor oils added ability to keep engines clean and better lubricated, thus guarding against damage to bearing surfaces. This protection assures longer engine life, less wear, fewer repairs.

more information

Manufacturers in the automotive or related industries can get more information by checking and returning the coupon. Or, write Monsanto Chemical Company, 1724 South Second Street, St. Louis 4, Missouri.

*Reg. U. S. Pat. Off.



Serving Industry... Which Serves Mankind

PLEASE CHECK THE INFORMATION YOU WANT... THEN FILL IN THE COUPON AND RETURN TO MONSANTO

- | | |
|--|--|
| <input type="checkbox"/> Accelerators for rubber | <input type="checkbox"/> Resimene surface-coating resins |
| <input type="checkbox"/> Antioxidants for rubber | <input type="checkbox"/> Viscosity index improvers |
| <input type="checkbox"/> Lustrex styrene molding compounds | <input type="checkbox"/> Detergent oil additives |
| <input type="checkbox"/> Ultron vinyl resin | <input type="checkbox"/> Heavy-duty oil additives |
| <input type="checkbox"/> Salflex, vinyl butylal | <input type="checkbox"/> Corrosion inhibitors |
| <input type="checkbox"/> Resinox molding compounds | <input type="checkbox"/> Antioxidants for lubricating oils |

MONSANTO CHEMICAL COMPANY
1724 South Second Street, St. Louis 4, Missouri

Please send information on products checked at the left to—

Name _____ Title _____
Company _____
Address _____
City _____ State _____